

EXHIBIT 20

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE DISTRICT OF NEW JERSEY

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4 _____
5 IN RE: JOHNSON & JOHNSON)
6 TALCUM POWER PRODUCTS MARKETING,) MDL NO.
7 SALES PRACTICES, AND PRODUCTS) 16-2738(MAS)(RLS)
8 LIABILITY LITIGATION)

9
10
11 DEPOSITION
12 OF
13 PATRICIA G. MOORMAN, Ph.D.

14
15 Tuesday, February 13, 2024

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17
18
19 GOLKOW LITIGATION SERVICES, INC.
20 877.370.3377 ph | 917.591.5672 fax
21 deps@golkow.com
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<p style="text-align: right;">Page 2</p> <p>1 DEPOSITION of PATRICIA G. MOORMAN, 2 Ph.D., a witness in the above-entitled action, 3 taken pursuant to notice, pursuant to the Federal 4 Rules of Civil Procedure before CINDY A. HAYDEN, 5 RMR, CRR, a Certified Shorthand Reporter, at The 6 Carolina Inn, 211 Pittsboro Street, Chapel Hill, 7 North Carolina, on the 13th day of February, 2024, 8 at 9:05 a.m. 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p style="text-align: right;">Page 4</p> <p>1 I N D E X 2 PAGE 3 EXAMINATION BY MS. DAVIDSON 6 4 EXAMINATION BY MS. PARFITT 244 5 EXAMINATION BY MS. DAVIDSON 245 6 EXAMINATION BY MS. PARFITT 247 7 8 E X H I B I T S 9 10 MOORMAN 11 NUMBER DESCRIPTION PAGE 12 EXHIBIT 1 Document titled Ovarian 25 13 Cancer Risk Factors 14 EXHIBIT 2 JAMA - Association of Powder 58 15 Use in the Genital Area With 16 Risk of Ovarian Cancer 17 EXHIBIT 3 Addendum to Rule 26 Expert 69 18 Report of Patricia G. 19 Moorman, MSPH, Ph.D. dated 20 11/16/18, Date: April 21, 21 2021 22 EXHIBIT 4 JAMA - Use of Powder in the 83 23 Genital Area and Ovarian 24 Cancer Risk, Examining the 25 Evidence 26 EXHIBIT 5 Reproductive Toxicology - 90 27 Critical review of the 28 association between perineal 29 use of talc powder and risk 30 of ovarian cancer 31 EXHIBIT 6 Supplemental Expert Report of 104 32 Patricia G. Moorman, MSPH, 33 Ph.D., dated 11/15/23 34 35</p>
<p style="text-align: right;">Page 3</p> <p>1 APPEARANCES: 2 ASHCRAFT & GEREL, LLP 3 BY: MICHELLE A. PARFITT, ESQ. 4 PATRICK LYONS, ESQ. (Remotely) 5 1825 K Street, N.W. 6 Washington, D.C. 20006 7 202.783.6400 8 mparfitt@ashcraftlaw.com 9 Counsel for Plaintiffs 10 11 ~ And ~ 12 LEVIN PAPANTONIO RAFFERTY 13 CHRISTOPHER V. TISI, ESQ. (Remotely) 14 316 South Baylen St. 15 Pensacola, FL 32502 16 850.435.7000 17 ctisi@levinlaw.com 18 19 ~ And ~ 20 GOLOMB & HONIK, P.C. 21 RICHARD GOLOMB, ESQ. (Remotely) 22 1835 Market Street, Suite 2900 23 Philadelphia, PA 19103 24 215.985.9177 25 rgolomb@golombhonik.com 26 27 SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP 28 BY: JESSICA DAVIDSON, ESQ. 29 ASHER TRANGLE, ESQ. 30 One Manhattan West 31 New York, NY 10001-8602 32 212.735.2588 33 jessica.davidson@skadden.com 34 asher.trangle@skadden.com 35 Counsel for Defendant</p>	<p style="text-align: right;">Page 5</p> <p>1 EXHIBIT 7 AACR - Genital Powder Use and 115 2 Risk of Epithelial Ovarian 3 Cancer in the Ovarian Cancer 4 in Women of African Ancestry 5 Consortium 6 EXHIBIT 8 Effects of risk factors for 120 7 ovarian cancer in women with 8 and without endometriosis 9 EXHIBIT 9 Supplemental Table 1 and 2 127 10 Phung 11 EXHIBIT 10 Association Between the 134 12 Frequent Use of Perineal 13 Talcum Powder Products and 14 Ovarian Cancer: a Systematic 15 Review and Meta-analysis 16 EXHIBIT 11 Supplementary Table 1 153 17 EXHIBIT 12 Markers of inflammation and 161 18 risk of ovarian cancer in 19 Los Angeles County 20 EXHIBIT 13 Douching and Genital Talc 171 21 Use: Patterns of Use and 22 Reliability of Self-reported 23 Exposure 24 EXHIBIT 14 The Association Between Talc 173 25 Use and Ovarian Cancer: A 26 Retrospective Case-Control 27 Study in Two US States 28 EXHIBIT 15 Supplemental eTable 6 189 29 EXHIBIT 16 Gynecologic Oncology - Talc, 211 30 body powder, and ovarian 31 cancer: A summary of the 32 epidemiologic evidence 33 EXHIBIT 17 Dr. Harlow's letter in 245 34 response to the O'Brien paper 35</p>

<p style="text-align: right;">Page 6</p> <p>1 PROCEEDINGS</p> <p>2 * * *</p> <p>3 PATRICIA G. MOORMAN, Ph.D.,</p> <p>4 having been first duly sworn, was examined and</p> <p>5 testified as follows:</p> <p>6 * * *</p> <p>7 EXAMINATION</p> <p>8 BY MS. DAVIDSON:</p> <p>9 Q. Dr. Moorman, please state your full</p> <p>10 name for the record.</p> <p>11 A. My name is Patricia Gripka Moorman.</p> <p>12 Q. What's the middle name?</p> <p>13 A. Gripka, G-R-I-P-K-A.</p> <p>14 Q. Is that your maiden name?</p> <p>15 A. Yes, it is.</p> <p>16 Q. You've been deposed before. I know</p> <p>17 that because I've read your depositions. So I'm</p> <p>18 going to forgo all the deposition rules. The main</p> <p>19 thing is to make sure that I finish my question,</p> <p>20 okay, and Michelle has enough time to object</p> <p>21 before you answer. Although that seems so easy,</p> <p>22 everyone messes it up. Okay. Other than that,</p> <p>23 I'm just going to go straight into the</p> <p>24 questioning.</p> <p>25 I assume you met with Ms. Parfitt to</p>	<p style="text-align: right;">Page 8</p> <p>1 MS. DAVIDSON: Any.</p> <p>2 MS. PARFITT: Thank you.</p> <p>3 THE WITNESS: I don't recall any -- I</p> <p>4 don't recall reviewing any other.</p> <p>5 BY MS. DAVIDSON:</p> <p>6 Q. As a scientist, you'd agree that it's</p> <p>7 important to evaluate all available evidence,</p> <p>8 right?</p> <p>9 A. Yes, it is important to review all the</p> <p>10 evidence.</p> <p>11 Q. Do you know how much money you've</p> <p>12 earned thus far in talc litigation?</p> <p>13 A. Well, it's -- as you know, I -- I did</p> <p>14 work back starting probably about 2018 or so, and</p> <p>15 I believe that I have submitted all of the</p> <p>16 invoices. I -- I don't recall the total amount.</p> <p>17 Q. Do you know if it's over or under</p> <p>18 \$200,000?</p> <p>19 A. Over how much?</p> <p>20 Q. 200.</p> <p>21 MS. PARFITT: Objection.</p> <p>22 THE WITNESS: I -- I really --</p> <p>23 MS. PARFITT: The -- objection. The</p> <p>24 invoices have been submitted.</p> <p>25 MS. DAVIDSON: I'm sorry. Let's just</p>
<p style="text-align: right;">Page 7</p> <p>1 prepare for this deposition?</p> <p>2 A. I did.</p> <p>3 Q. When was that?</p> <p>4 A. I met with her yesterday afternoon. I</p> <p>5 met with her for the originally scheduled</p> <p>6 deposition last month. Those two times.</p> <p>7 Q. And did she show you any documents</p> <p>8 that you hadn't previously reviewed or listed as</p> <p>9 materials you considered?</p> <p>10 A. No, I don't believe so.</p> <p>11 Q. Do you have any notes that you've</p> <p>12 taken in this litigation?</p> <p>13 A. No, I do not.</p> <p>14 Q. Are you offering an opinion that</p> <p>15 Johnson's Baby Powder contains asbestos?</p> <p>16 A. My understanding is that there are</p> <p>17 other experts who are testifying to that. I have</p> <p>18 read documents that have indicated such. But my</p> <p>19 opinion is that Johnson's Baby Powder causes</p> <p>20 ovarian cancer regardless of the substances in it.</p> <p>21 Q. Have you reviewed defendant's experts'</p> <p>22 reports with respect to testing of Johnson's Baby</p> <p>23 Powder for asbestos?</p> <p>24 MS. PARFITT: Objection. Can you be</p> <p>25 more specific? Which reports?</p>	<p style="text-align: right;">Page 9</p> <p>1 go off the record for one second because I</p> <p>2 may be mistaken.</p> <p>3 * * *</p> <p>4 (Whereupon, there was a recess in the</p> <p>5 proceedings from 9:09 a.m. to 9:10 a.m.)</p> <p>6 * * *</p> <p>7 MS. PARFITT: We have available for</p> <p>8 you the invoices that have been submitted</p> <p>9 to the MDL for her federal cases. The most</p> <p>10 recent ones -- you should have everything</p> <p>11 at the last deposition.</p> <p>12 BY MS. DAVIDSON:</p> <p>13 Q. We have all the MDL stuff. But my</p> <p>14 question was: What's the total you've billed for</p> <p>15 talc litigation?</p> <p>16 MS. PARFITT: If she knows. We don't</p> <p>17 have any other invoices here.</p> <p>18 Trish, if you know. If you don't</p> <p>19 know, don't guess.</p> <p>20 THE WITNESS: I -- I don't know the</p> <p>21 total. You know, you have the invoices for</p> <p>22 the MDL litigation, the amount for the 2021</p> <p>23 report. It was probably 40-ish hours that</p> <p>24 I billed. I would -- but -- but that is an</p> <p>25 estimate definitely.</p>

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1 BY MS. DAVIDSON:
 2 Q. Okay. Who did you invoice for the
 3 2021 report?
 4 A. Steve Faries, who was at Mueller law
 5 firm in Texas had asked me to do that.
 6 Q. Okay.
 7 A. And I had submitted it to --
 8 Q. Oh, so that wasn't through Michelle.
 9 I didn't understand that. And then other than
 10 Kleiner, Ingham and MDL?
 11 A. Kleiner?
 12 Q. Kleiner is Philadelphia.
 13 A. Yeah.
 14 Q. Ingham is Missouri.
 15 MS. PARFITT: Okay. Just for the
 16 record, she has not submitted Kleiner or
 17 Ingham to the MDL, so we don't have --
 18 MS. DAVIDSON: That wasn't my
 19 question.
 20 MS. PARFITT: Well, we don't have the
 21 invoices, and she doesn't either.
 22 MS. DAVIDSON: I know, but that wasn't
 23 my question. You interrupted my question.
 24 You broke the one rule I made.
 25 MS. PARFITT: I'm sorry. I'm -- I'm

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1 trying to clarify.
 2 MS. DAVIDSON: My one rule.
 3 MS. PARFITT: I know. I'm trying to
 4 clarify, Jessica.
 5 MS. DAVIDSON: I know. Michelle and I
 6 are going to get along today.
 7 BY MS. DAVIDSON:
 8 Q. Other than Kleiner, Philadelphia;
 9 Ingham, Missouri; and the MDL, have you -- have
 10 you provided any testimony or reports in any other
 11 talc cases?
 12 A. The Kleiner -- I'm -- I do not recall
 13 that name. The name for the 2021 report was
 14 Guthrie.
 15 MS. DAVIDSON: Okay. I thought you
 16 had told me it was Kleiner.
 17 MS. PARFITT: No.
 18 MS. DAVIDSON: You said it was for
 19 Philadelphia.
 20 MS. PARFITT: No. It is Philadelphia.
 21 I have no idea which case it is.
 22 MS. DAVIDSON: Oh, it's another
 23 Philadelphia case.
 24 MS. PARFITT: So I don't know that
 25 case.

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1 MS. DAVIDSON: Okay.
 2 MS. PARFITT: And so I don't know --
 3 MS. DAVIDSON: Okay. I'm sorry.
 4 BY MS. DAVIDSON:
 5 Q. When you said -- did you -- were you
 6 deposited in that case?
 7 A. No, I was not.
 8 Q. Okay. So other than Guthrie, Ingham
 9 and the MDL, have you provided a report or been
 10 deposited in any other talc case?
 11 A. No, I have not.
 12 Q. Okay. Perfect. We can move on.
 13 So our records show about 102,000 plus
 14 the 40 hours to get us to about 125,000?
 15 MR. TRANGLE: 118,000.
 16 BY MS. DAVIDSON:
 17 Q. Does that sound about right, \$120,000?
 18 MS. PARFITT: Objection.
 19 You can answer.
 20 THE WITNESS: You know, again, you --
 21 I have submitted those invoices. They're
 22 accurate to the best of my knowledge, but I
 23 do not recall the total sum. It does not
 24 sound, like, wildly out of whack, so -- but
 25 I -- I don't know how close it is.

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1 BY MS. DAVIDSON:
 2 Q. What percentage of your income over
 3 the last several years has come from talc
 4 litigation?
 5 A. Well, as you -- as you probably know
 6 if you looked at my CV, I retired from Duke
 7 University in summer of 2021. And so in terms of
 8 earned income, I have no income from talc in 2023,
 9 2022 -- I'm sorry. I misspoke a little bit. I
 10 think -- let's see. What was the invoice for? It
 11 was like 17,000?
 12 MS. PARFITT: And just so you know,
 13 Jessica, I'm showing her the two invoices,
 14 so --
 15 THE WITNESS: Right. Yeah.
 16 BY MS. DAVIDSON:
 17 Q. Uh-huh.
 18 MS. PARFITT: So --
 19 BY MS. DAVIDSON:
 20 Q. Let's just introduce this as a
 21 demonstrative, which is, we put your invoices on
 22 one page. That will make your life easier. This
 23 is all we've got.
 24 A. Okay. So, in 2023, it was \$17,000.
 25 And in terms of my earned income, that was the

<p style="text-align: right;">Page 14</p> <p>1 bulk of it. But at this point, my income is</p> <p>2 basically my retirement income. And this</p> <p>3 represents, the 17,000, I would say probably</p> <p>4 10 percent or less of my -- my -- our income.</p> <p>5 Q. When you say "our income," you're</p> <p>6 including your spouse's income?</p> <p>7 A. Yes.</p> <p>8 Q. Do you get a pension from Duke?</p> <p>9 MS. PARFITT: Objection. Relevance.</p> <p>10 And I'm going to object with regard to any</p> <p>11 question regarding her pension. That's not</p> <p>12 relevant.</p> <p>13 MS. DAVIDSON: Okay. But I -- I have</p> <p>14 a right to ask it. She said she has</p> <p>15 unearned income.</p> <p>16 BY MS. DAVIDSON:</p> <p>17 Q. I'm just trying to understand. Is</p> <p>18 that a pension from Duke that you're talking</p> <p>19 about?</p> <p>20 A. There is not a pension from Duke.</p> <p>21 There was -- you know, throughout my career, I</p> <p>22 contributed to 403(b) --</p> <p>23 Q. Got it.</p> <p>24 A. -- or whatever, and so there is some</p> <p>25 income from that.</p>	<p style="text-align: right;">Page 16</p> <p>1 testimony as well as the testimony of all of the</p> <p>2 plaintiffs' experts were excluded, which I clearly</p> <p>3 disagreed with, because the methodology that I</p> <p>4 used is the same methodology that I've used in</p> <p>5 this case, which has been approved by the court.</p> <p>6 It's the same methodology that I used throughout</p> <p>7 my career when I'm writing papers, writing grants,</p> <p>8 reviewing papers, reviewing grants.</p> <p>9 Q. And you've read that opinion?</p> <p>10 A. I read -- yeah, a couple of years ago</p> <p>11 I did read --</p> <p>12 Q. The parts about you. It's a long</p> <p>13 opinion, I understand.</p> <p>14 A. Yeah.</p> <p>15 Q. Is that what you're saying? You</p> <p>16 focused in on --</p> <p>17 A. Yeah, I read it a couple of years ago,</p> <p>18 and I -- I can't say that I read every single word</p> <p>19 of the opinion.</p> <p>20 Q. I'm a lawyer. I thought the opinion</p> <p>21 was long. Very thorough, but long.</p> <p>22 Okay. So do you have any remaining</p> <p>23 activities with UNC or Duke?</p> <p>24 A. I am professor emerita in the</p> <p>25 Department of Community -- yeah -- Family Medicine</p>
<p style="text-align: right;">Page 15</p> <p>1 Q. Got it.</p> <p>2 And is the only other litigation that</p> <p>3 you've been involved in the last few years Zantac?</p> <p>4 A. Yes, it is.</p> <p>5 Q. And do you know how much you've made</p> <p>6 in the Zantac litigation?</p> <p>7 A. Again, I do not recall the exact</p> <p>8 amount. I know that I billed for several hundred</p> <p>9 hours.</p> <p>10 Q. You billed for several hundred hours?</p> <p>11 A. Uh-huh.</p> <p>12 Q. And was your rate 400 an hour?</p> <p>13 A. Yes, it was.</p> <p>14 Q. Are you still involved in Zantac</p> <p>15 litigation?</p> <p>16 A. No, I am not.</p> <p>17 Q. When did you stop being involved?</p> <p>18 A. The last -- I gave a deposition. I</p> <p>19 think it was in October of 2022.</p> <p>20 Q. Uh-huh.</p> <p>21 A. And that was the last work that I did</p> <p>22 with that.</p> <p>23 Q. Are you aware that the federal court</p> <p>24 excluded your testimony there?</p> <p>25 A. I am aware that the testimony -- my</p>	<p style="text-align: right;">Page 17</p> <p>1 and Community Health. They changed their -- the</p> <p>2 department name a few years ago. And -- so I have</p> <p>3 some privileges in that regard.</p> <p>4 I am included on e-mails and so</p> <p>5 departmental meetings, seminars and such like</p> <p>6 that. I have access to the Duke library. Since I</p> <p>7 have retired, once in a while, not too often, I</p> <p>8 will be asked could I review something. But</p> <p>9 that's about it.</p> <p>10 Q. Do you know Katie O'Brien?</p> <p>11 A. I have never met her, to my knowledge.</p> <p>12 I obviously have read several of her papers.</p> <p>13 Q. She lives in the Research Triangle.</p> <p>14 That's why I asked.</p> <p>15 A. Right. Yeah.</p> <p>16 Q. But you've never come across her</p> <p>17 professionally?</p> <p>18 A. No. I believe that she works at</p> <p>19 NIEHS. I know some of the people in that group,</p> <p>20 but I don't believe that I have ever met her.</p> <p>21 Q. Have you ever spoken to her,</p> <p>22 communicated with her by email?</p> <p>23 A. No, I have not.</p> <p>24 Q. Did you reach out to her with any</p> <p>25 questions about any of her papers?</p>

<p style="text-align: right;">Page 18</p> <p>1 A. No, I did not.</p> <p>2 Q. Are you still an adjunct professor at</p> <p>3 UNC?</p> <p>4 A. When I retired, I had stopped that as</p> <p>5 well.</p> <p>6 Q. So your CV says adjunct associate</p> <p>7 professor 2005 till present at UNC. That just</p> <p>8 needs to be updated?</p> <p>9 A. Yes, it does.</p> <p>10 Q. When did you stop doing that?</p> <p>11 A. The last time that I actually did any</p> <p>12 work related to that adjunct appointment was when</p> <p>13 I was on a dissertation committee that -- I want</p> <p>14 to say that it was probably like 2019 when she</p> <p>15 defended. It was pre-COVID.</p> <p>16 Q. When was the last time you taught a</p> <p>17 course?</p> <p>18 A. It's -- I'm not remembering the exact</p> <p>19 year. I -- probably about 2018, '19, something</p> <p>20 like that.</p> <p>21 Q. And what was that course?</p> <p>22 A. The course was called Evidence-Based</p> <p>23 Practice, and I actually taught Evidence-Based</p> <p>24 Practice 1 and 2. They -- these were courses for</p> <p>25 the physician assistant students. The physician</p>	<p style="text-align: right;">Page 20</p> <p>1 Q. Have you spoken in any public forum</p> <p>2 about talc and ovarian cancer since 2019?</p> <p>3 A. No, I have not.</p> <p>4 Q. Do you recall what the judge in Zantac</p> <p>5 said as to why she was excluding your opinions?</p> <p>6 A. It has been a couple of years since</p> <p>7 I've read that opinion. Right off the top of my</p> <p>8 head, I -- I can't remember a lot of the details.</p> <p>9 Q. Do you remember any of the details?</p> <p>10 A. Some of it was -- I cited some data</p> <p>11 related to the indium A in food products, and</p> <p>12 despite nutritional epidemiology being a</p> <p>13 well-respected field, I think that the judge did</p> <p>14 not like that we were using that as part of the --</p> <p>15 or that I was using that as part of my arguments.</p> <p>16 But generally, I -- the methodology,</p> <p>17 as I said before, is what I have used throughout</p> <p>18 my career, and I did not think that it was -- I</p> <p>19 didn't agree with that decision.</p> <p>20 Q. Have you reached out to any public</p> <p>21 health organizations about talc and ovarian cancer</p> <p>22 since 2019?</p> <p>23 A. To the extent that I speak through the</p> <p>24 publications, and so my -- as being a part of a</p> <p>25 co-author on another paper with talc, that was</p>
<p style="text-align: right;">Page 19</p> <p>1 assistant program was in my department, and so the</p> <p>2 first-year students took Evidence-Based Practice</p> <p>3 1, and the second-year students took EBP 2.</p> <p>4 Q. Did you mention talc in that course?</p> <p>5 A. I don't recall if I did. I certainly</p> <p>6 didn't emphasize it in any way.</p> <p>7 Q. Have you authored any publications</p> <p>8 concerning talc and ovarian cancer since January</p> <p>9 2019?</p> <p>10 A. Have I authored? Yes. I am a</p> <p>11 co-author on a paper. Colette Davis was the first</p> <p>12 author. And that was part of the Ovarian Cancer</p> <p>13 in Women of African Ancestry Consortium. And so I</p> <p>14 was a co-author on that paper.</p> <p>15 Q. Any other papers?</p> <p>16 A. Related to talc, no, I don't believe</p> <p>17 so.</p> <p>18 Q. Do you have any planned papers or</p> <p>19 papers under way with regard to talc?</p> <p>20 A. There is nothing in progress, no.</p> <p>21 Q. Have you ever published any papers</p> <p>22 about asbestos and ovarian cancer?</p> <p>23 A. No, I have not.</p> <p>24 Q. Do you have any plans to do so?</p> <p>25 A. Nothing that's in progress, no.</p>	<p style="text-align: right;">Page 21</p> <p>1 certainly considered by public health</p> <p>2 organizations. But have I directly addressed</p> <p>3 public -- a public health organization? No, I</p> <p>4 have not.</p> <p>5 Q. And when you say through your papers,</p> <p>6 you're talking about the Davis paper?</p> <p>7 A. Correct.</p> <p>8 Q. When was the last time you went on the</p> <p>9 ACOG website?</p> <p>10 A. I don't recall.</p> <p>11 Q. Have you ever been on the ACOG</p> <p>12 website?</p> <p>13 A. I'm sure I have over the course of my</p> <p>14 career.</p> <p>15 Q. Have you ever looked at what ACOG has</p> <p>16 to say about risk factors for ovarian cancer?</p> <p>17 A. I am sure I have at some point. I</p> <p>18 don't recall when I did that.</p> <p>19 Q. Are you aware they updated their FAQ</p> <p>20 for ovarian cancer in 2022?</p> <p>21 A. I don't recall seeing that, no.</p> <p>22 Q. Do you know whether they list talc as</p> <p>23 a risk factor for ovarian cancer?</p> <p>24 A. Like I said, I haven't -- I don't</p> <p>25 recall the last time I looked at their website.</p>

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1 So I -- I don't know what it says currently.
 2 Q. Are you aware that ACOG has a section
 3 on their FAQ with recommendations on how to reduce
 4 the risk for ovarian cancer?
 5 A. Again, it has been so long since I've
 6 looked at that website that I just -- I -- I don't
 7 know.
 8 Q. I believe you testified in 2019 that
 9 you disagreed with ACOG on the -- on its list of
 10 risk factors for ovarian cancer. Have you ever
 11 reached out to ACOG to express your view that you
 12 disagree with ACOG's views on ovarian cancer?
 13 A. I have not.
 14 Q. Does either Duke or UNC advise women
 15 not to use talc?
 16 MS. PARFITT: Objection.
 17 THE WITNESS: You're talking about
 18 universities, and I am not aware of
 19 anything at either university -- that I
 20 don't know what individual physicians tell
 21 their patients.
 22 BY MS. DAVIDSON:
 23 Q. Have you ever looked to see if either
 24 Duke Hospital or UNC Hospital has on their website
 25 a list of risk factors for ovarian cancer?

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1 A. I am not aware of that at -- at Duke.
 2 I have never looked at UNC.
 3 Q. Just to be clear, you don't know
 4 whether Duke or UNC has a web -- either one has a
 5 website on which either hospital lists risk
 6 factors for ovarian cancer?
 7 A. I am not aware of any.
 8 Q. Have you ever contacted Duke or
 9 UNC Hospital and suggested that they add talc as a
 10 potential risk factor on their websites --
 11 A. I have not.
 12 Q. I was in the middle of my question.
 13 That's no big deal.
 14 A. I'm sorry.
 15 Q. Let's just try to make sure that I
 16 finish my question, just for the court reporter.
 17 So did you get the full question?
 18 I mean, you had -- you guessed
 19 correctly what the question was. I'm just
 20 worried about a clear record.
 21 A. I'm sorry. I thought that you were
 22 finished.
 23 MS. PARFITT: I did, too, Jessica.
 24 BY MS. DAVIDSON:
 25 Q. I just said "as a risk factor," and

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1 then I was going to say "for ovarian cancer." So
 2 just let's give ten seconds. It's better for
 3 Michelle, too, because then she can object.
 4 MS. PARFITT: She's a New Yorker. She
 5 speaks fast.
 6 THE WITNESS: Okay. Could you please
 7 restate it?
 8 BY MS. DAVIDSON:
 9 Q. No, it's fine. I think you got it.
 10 What I had said was: Have you ever
 11 reached out to either Duke Hospital or UNC
 12 Hospital to suggest that they add talc as a
 13 potential risk factor for ovarian cancer on their
 14 website?
 15 A. No, I have not.
 16 Q. Now we have a clear record.
 17 Okay. Are you familiar with SGO?
 18 A. Yes, I am.
 19 Q. Have you ever been on their website?
 20 A. I might have at some point. I don't
 21 recall.
 22 Q. Do you know if they list risk factors
 23 for ovarian cancer?
 24 A. As I said, I don't recall when I have
 25 been on their website.

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1 Q. Well, why don't we take a look at it,
 2 then.
 3 MS. DAVIDSON: Let's mark that as
 4 Exhibit 1.
 5 (MOORMAN EXHIBIT 1, Document titled
 6 Ovarian Cancer Risk Factors, was marked for
 7 identification.)
 8 MS. PARFITT: Jessica, I don't see a
 9 date on this. I may have missed it.
 10 MR. TRANGLE: There's not on the
 11 website.
 12 MS. PARFITT: So if we could just have
 13 a representation of what date.
 14 MR. TRANGLE: It's in January 2024.
 15 MS. PARFITT: January 2024. Is there
 16 a specific date in January 2024? You knew
 17 I was going to ask you that.
 18 MR. TRANGLE: Yeah.
 19 MS. DAVIDSON: You can access it now.
 20 Make sure it hasn't changed, Asher, while
 21 we're talking about it.
 22 MR. TRANGLE: I can do that as well.
 23 BY MS. DAVIDSON:
 24 Q. Do you see talc on the list of risk
 25 factors?

<p style="text-align: right;">Page 26</p> <p>1 A. Let me look through.</p> <p>2 MS. PARFITT: What exhibit is this?</p> <p>3 THE REPORTER: 1.</p> <p>4 MS. DAVIDSON: Asher has just</p> <p>5 represented that it has not changed as of</p> <p>6 today, which is February 13, 2024.</p> <p>7 MS. PARFITT: All right. So Exhibit 1</p> <p>8 is a reflection of what appears on the</p> <p>9 website for SGO as of --</p> <p>10 MR. TRANGLE: February --</p> <p>11 MS. PARFITT: -- February 13th --</p> <p>12 thank you -- 2024. Thank you.</p> <p>13 THE WITNESS: No, this list of risk</p> <p>14 factors does not include talc.</p> <p>15 BY MS. DAVIDSON:</p> <p>16 Q. Do you disagree with the SGO's</p> <p>17 decision not to list talc here?</p> <p>18 A. I don't know what their process is for</p> <p>19 making these determinations. I -- I agree with</p> <p>20 Health Canada, which went through a very thorough</p> <p>21 systematic review of the literature and came to</p> <p>22 the conclusion that it was a risk factor. I don't</p> <p>23 know that they have gone through a similar process</p> <p>24 to arrive at that.</p> <p>25 Q. Have you -- have you contacted SGO to</p>	<p style="text-align: right;">Page 28</p> <p>1 mean, we'll bring it up later. I'm just -- I'm</p> <p>2 just wondering if you have reached out to the NCI</p> <p>3 PDQ to suggest that they revise what they have</p> <p>4 written about talc.</p> <p>5 A. I have not. You know, I hope that we</p> <p>6 will talk about that more, because I think that</p> <p>7 their description of what they've put in their</p> <p>8 report I think is not a thorough review of the</p> <p>9 evidence. I think that there is some</p> <p>10 contradictory information, not only within the</p> <p>11 talc statement, but also I think that there is</p> <p>12 some contradiction or some inconsistency in the --</p> <p>13 what they consider adequate evidence for other</p> <p>14 risk factors as compared to talc.</p> <p>15 Q. Have you ever reached out to anyone</p> <p>16 involved in the NCI PDQ to share this opinion?</p> <p>17 A. No, I have not.</p> <p>18 Q. When you talk about other risk</p> <p>19 factors, are you talking about breastfeeding?</p> <p>20 MS. PARFITT: Objection to form.</p> <p>21 THE WITNESS: That is one of the --</p> <p>22 well, it's actually a protective factor.</p> <p>23 That is not particularly what I had in</p> <p>24 mind.</p> <p>25 BY MS. DAVIDSON:</p>
<p style="text-align: right;">Page 27</p> <p>1 find out what process they did go through?</p> <p>2 A. No, I have not.</p> <p>3 Q. Have you contacted SGO to tell them</p> <p>4 you disagree with them?</p> <p>5 A. No, I have not.</p> <p>6 Q. We've talked about the NCI PDQ with</p> <p>7 you before. When I say "we," that's a collective</p> <p>8 royal "we." Whoever deposed you in 2019 -- I</p> <p>9 believe it was Scott James at Shook Hardy -- you</p> <p>10 guys talked about NCI's PDQ. Do you recall that?</p> <p>11 A. Vaguely. Yes, I do vaguely recall.</p> <p>12 Q. And you're aware that that PDQ was</p> <p>13 updated in 2023?</p> <p>14 MS. PARFITT: Objection.</p> <p>15 THE WITNESS: I am. And I'm aware</p> <p>16 that it has been updated. I don't know the</p> <p>17 exact date when it was updated.</p> <p>18 BY MS. DAVIDSON:</p> <p>19 Q. And you're aware that as of that</p> <p>20 update, which was October 2023, the NCI PDQ says</p> <p>21 there's inadequate evidence of an association,</p> <p>22 correct?</p> <p>23 A. Could we bring up that document since</p> <p>24 you brought it up?</p> <p>25 Q. Yeah, I don't have any other -- I</p>	<p style="text-align: right;">Page 29</p> <p>1 Q. At your last deposition, you mentioned</p> <p>2 breastfeeding as -- you're right, it's a</p> <p>3 protective factor, but as a factor -- let's say,</p> <p>4 as a factor which you thought there was equal</p> <p>5 evidence. Are there other factors you have in</p> <p>6 mind?</p> <p>7 MS. PARFITT: Objection. Form.</p> <p>8 THE WITNESS: Yes, there are at least</p> <p>9 two other factors that I can think of.</p> <p>10 BY MS. DAVIDSON:</p> <p>11 Q. What are those two factors?</p> <p>12 A. The -- again, it would be very helpful</p> <p>13 if we could --</p> <p>14 MS. DAVIDSON: We're going to look at</p> <p>15 the PDQ later. She said she has two</p> <p>16 factors in mind. I want to know what those</p> <p>17 are, and then we'll look at the --</p> <p>18 MS. PARFITT: Okay.</p> <p>19 MS. DAVIDSON: -- PDQ later.</p> <p>20 MS. PARFITT: Jessica, we can do it --</p> <p>21 your deposition. Believe me --</p> <p>22 MS. DAVIDSON: Correct.</p> <p>23 MS. PARFITT: -- I'm not trying to</p> <p>24 control it. But if you're going to talk</p> <p>25 about that -- it was fine to ask the</p>

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1 question about whether or not she has
 2 complained to them about --
 3 MS. DAVIDSON: I understand.
 4 MS. PARFITT: -- her opinion --
 5 MS. DAVIDSON: But she just said, I
 6 have two factors in mind.
 7 MS. PARFITT: She can identify them --
 8 MS. DAVIDSON: Yeah.
 9 MS. PARFITT: -- but that's all she'll
 10 do.
 11 MS. DAVIDSON: And that's all I want.
 12 MS. PARFITT: If there's any further
 13 explanation --
 14 MS. DAVIDSON: Yeah. I'm not --
 15 MS. PARFITT: -- we'll wait till you
 16 have the document --
 17 MS. DAVIDSON: Correct.
 18 MS. PARFITT: -- in front of you.
 19 MS. DAVIDSON: I completely agree.
 20 We're on the same page.
 21 THE WITNESS: Okay. One of them is
 22 the DMPA, the depot medroxyprogesterone
 23 acetate.
 24 BY MS. DAVIDSON:
 25 Q. Uh-huh. And the other?

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1 A. The other one is obesity --
 2 Q. Okay. Got it.
 3 A. -- or body mass index.
 4 Q. Thanks. Those were all my questions.
 5 Are you familiar with the CDC?
 6 A. Yes, I am.
 7 Q. Is that a highly respected
 8 organization?
 9 A. Generally, yes.
 10 Q. Is ACOG a highly respected
 11 organization?
 12 A. Yes. Generally, it is.
 13 Q. Is SGO a highly respected
 14 organization?
 15 A. I would say, generally, it is, yes.
 16 Q. The CDC is considered a respected
 17 authority on public health issues, right?
 18 A. Please repeat that.
 19 MS. DAVIDSON: Did you get it?
 20 THE REPORTER: Yes.
 21 (The following question was read back:
 22 Q: The CDC is considered a respected
 23 authority on public health issues, right?)
 24 THE WITNESS: Generally, yes.
 25 BY MS. DAVIDSON:

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1 Q. Have you taken a look at the CDC
 2 website to see the list of risk factors they have
 3 for ovarian cancer?
 4 A. I have. I don't remember the last
 5 time I looked at it.
 6 Q. The last time you looked, was talc on
 7 the list?
 8 MS. PARFITT: Objection.
 9 THE WITNESS: I don't remember
 10 specifically. I just don't remember.
 11 BY MS. DAVIDSON:
 12 Q. Do you believe the CDC should have
 13 talc listed as a risk factor for ovarian cancer?
 14 A. It is my opinion that talc is a risk
 15 factor for ovarian cancer. And, yes, I would -- I
 16 think that it would be a good thing to include.
 17 Q. Have you ever reached out to the CDC
 18 and told them that?
 19 A. I have not.
 20 Q. So just to make sure I've got your
 21 testimony right, you've never reached out to ACOG,
 22 SGO, NCI PDQ, CDC, Duke or North Carolina to
 23 suggest that any of them add talc as a risk factor
 24 for ovarian cancer, correct?
 25 A. I have not. I feel like my -- my work

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1 speaks for itself.
 2 Q. And when you say your work, you're
 3 referring to the Davis paper?
 4 A. I'm referring not only to that --
 5 that's the most recent one -- but also the
 6 previous papers published related to talc.
 7 Q. And what are those previous papers?
 8 A. The -- Schildkraut was the first
 9 author. That was 2016-ish. And then also
 10 published a paper from the North Carolina ovarian
 11 cancer study much earlier that also provided data
 12 on talc and ovarian cancer. That was probably, I
 13 don't know, 2009-ish.
 14 Q. In the Schildkraut paper, in the
 15 conclusions, did you guys state that talc causes
 16 ovarian cancer?
 17 MS. PARFITT: Can she have a copy?
 18 MS. DAVIDSON: She wrote it.
 19 MS. PARFITT: Jessica, she may have
 20 written it, but it was back in 2016.
 21 MS. DAVIDSON: Okay.
 22 MS. PARFITT: Do you think it's
 23 fair --
 24 BY MS. DAVIDSON:
 25 Q. Do you recall -- do you recall whether

<p style="text-align: right;">Page 34</p> <p>1 the Schildkraut paper states that talc causes 2 ovarian cancer? 3 MS. PARFITT: Let's get the paper. 4 MS. DAVIDSON: Michelle, it's my 5 deposition. I will give her the article if 6 we're asking any further -- 7 THE WITNESS: May I -- 8 MS. DAVIDSON: -- questions beyond 9 this one. 10 THE WITNESS: May I see? 11 MS. DAVIDSON: I'm just asking if she 12 recalls. 13 MS. PARFITT: She's asking for it. 14 BY MS. DAVIDSON: 15 Q. Do you recall, sitting here, 16 whether -- 17 A. I would like to -- 18 MS. PARFITT: She's asked for the 19 paper, Jessica. 20 THE WITNESS: I would just like to -- 21 MS. DAVIDSON: I just want to know if 22 she recalls. If the answer is no, we'll 23 move on, and we can look at the paper 24 later. 25 MS. PARFITT: The other response could</p>	<p style="text-align: right;">Page 36</p> <p>1 sitting here today -- 2 MS. DAVIDSON: Are you instructing her 3 not to answer? 4 MS. PARFITT: I am instructing her to 5 answer a question when the witness has said 6 to you, Counsel, I would like to have a 7 copy of the paper and I'll answer -- 8 MS. DAVIDSON: I understand. 9 MS. PARFITT: -- your one question, 10 and you refuse to give it to her. 11 MS. DAVIDSON: Because I just -- 12 MS. PARFITT: Just hand her the paper. 13 MS. DAVIDSON: I wanted to know what 14 she recalls. 15 BY MS. DAVIDSON: 16 Q. Do you recall whether the 17 Schildkraut -- 18 MS. PARFITT: It's not a memory test. 19 MS. DAVIDSON: Okay. Thank you. 20 MS. PARFITT: It's not a memory test. 21 BY MS. DAVIDSON: 22 Q. Do you recall whether the Schildkraut 23 paper says in its conclusion that talc causes 24 ovarian cancer? 25 MS. PARFITT: If you can answer that</p>
<p style="text-align: right;">Page 35</p> <p>1 be that I can't respond to your question 2 because you won't give me the paper. 3 MS. DAVIDSON: That -- that's called 4 coaching the witness. 5 MS. PARFITT: Well -- 6 BY MS. DAVIDSON: 7 Q. Do you recall, sitting here today, 8 without looking at the paper whether it states 9 that talc causes ovarian cancer? 10 MS. PARFITT: The witness has asked 11 for the paper. 12 MS. DAVIDSON: I understand. 13 MS. PARFITT: Counsel, as a 14 courtesy -- 15 MS. DAVIDSON: Okay. 16 MS. PARFITT: -- could you please give 17 her the paper, and she'll give you a 18 response to your question. I assure she 19 will. 20 MS. DAVIDSON: And then if I ask any 21 further questions about the paper beyond 22 this one, I will show her the paper. 23 MS. PARFITT: No. 24 BY MS. DAVIDSON: 25 Q. I would just like to know whether</p>	<p style="text-align: right;">Page 37</p> <p>1 question. 2 THE WITNESS: I do not recall the 3 exact phrasing that we used. I -- I 4 believe that we certainly -- the conclusion 5 indicated that we found increased risk of 6 ovarian cancer. The exact phrasing, I 7 don't recall. It's a paper, as we know, 8 that was published seven years ago. 9 BY MS. DAVIDSON: 10 Q. The same question as to Davis: Do you 11 recall in Davis, a much more recent paper, whether 12 you said in the conclusion that talc causes 13 ovarian cancer? 14 MS. PARFITT: Jessica, I am going to 15 object. I really want -- 16 MS. DAVIDSON: These -- 17 MS. PARFITT: -- this to go in a 18 conciliatory manner. 19 MS. DAVIDSON: Okay. 20 MS. PARFITT: I really do. This is -- 21 why don't you just show her the paper. 22 MS. DAVIDSON: Okay, Michelle. I will 23 when we get into these topics with more 24 detail. Right now, I'm just asking a very 25 general question --</p>

<p style="text-align: right;">Page 38</p> <p>1 MS. PARFITT: It's --</p> <p>2 MS. DAVIDSON: -- whether you recall</p> <p>3 whether Davis concludes that talc causes</p> <p>4 ovarian cancer --</p> <p>5 MS. PARFITT: I'm going to object --</p> <p>6 MS. DAVIDSON: -- and the simple</p> <p>7 answer is "no" if she doesn't recall,</p> <p>8 Michelle.</p> <p>9 MS. PARFITT: It's not a question --</p> <p>10 MS. DAVIDSON: Michelle --</p> <p>11 MS. PARFITT: -- of whether she</p> <p>12 recalls, Jessica.</p> <p>13 MS. DAVIDSON: But that's my question.</p> <p>14 MS. PARFITT: But she's telling you --</p> <p>15 MS. DAVIDSON: Okay.</p> <p>16 MS. PARFITT: -- she can answer the</p> <p>17 question accurately if you give her --</p> <p>18 MS. DAVIDSON: Okay.</p> <p>19 MS. PARFITT: -- the paper. Isn't</p> <p>20 that what you want?</p> <p>21 BY MS. DAVIDSON:</p> <p>22 Q. My question is whether you recall that</p> <p>23 about Davis.</p> <p>24 MS. PARFITT: If you can't answer</p> <p>25 without the paper, tell her.</p>	<p style="text-align: right;">Page 40</p> <p>1 take it to the judge.</p> <p>2 MS. DAVIDSON: We will do so.</p> <p>3 Let's take a break.</p> <p>4 MS. PARFITT: Yes.</p> <p>5 * * *</p> <p>6 (Whereupon, there was a recess in the</p> <p>7 proceedings from 9:43 a.m. to 9:50 a.m.)</p> <p>8 * * *</p> <p>9 BY MS. DAVIDSON:</p> <p>10 Q. Dr. Moorman, can you recall, sitting</p> <p>11 here today, any paper you have ever published</p> <p>12 outside the litigation in which you state that</p> <p>13 talc causes ovarian cancer?</p> <p>14 MS. PARFITT: Objection.</p> <p>15 THE WITNESS: I -- what is more</p> <p>16 typical in papers -- in the papers that we</p> <p>17 write, we describe what is -- whether talc</p> <p>18 shows increased risk and so on.</p> <p>19 There is actually quite a literature</p> <p>20 about using the word "cause." Sometimes</p> <p>21 people will object to using the word</p> <p>22 "cause" if it does not come from a</p> <p>23 randomized control trial.</p> <p>24 The literature -- one author who</p> <p>25 discussed this -- I believe his last name</p>
<p style="text-align: right;">Page 39</p> <p>1 MS. DAVIDSON: That's the question,</p> <p>2 "Do you recall?" If she can't recall</p> <p>3 without the paper, the answer is "no."</p> <p>4 MS. PARFITT: There's -- don't even</p> <p>5 ask the question.</p> <p>6 MS. DAVIDSON: Okay.</p> <p>7 BY MS. DAVIDSON:</p> <p>8 Q. Okay. Do you recall in the Davis</p> <p>9 paper, which is quite recent, whether the authors,</p> <p>10 including you, conclude that talc causes ovarian</p> <p>11 cancer?</p> <p>12 MS. PARFITT: I am going to instruct</p> <p>13 you not to answer the question.</p> <p>14 If you want to take that one to the</p> <p>15 judge, I'll be happy to do that, too, and</p> <p>16 indicated to counsel she asked for the</p> <p>17 paper; you won't give it to her. How do</p> <p>18 you want to go?</p> <p>19 BY MS. DAVIDSON:</p> <p>20 Q. Are you refusing to answer that</p> <p>21 question, whether you recall that?</p> <p>22 MS. PARFITT: I'm telling her not to</p> <p>23 answer the question if you won't give her</p> <p>24 the document.</p> <p>25 Don't answer. Put it down. We can</p>	<p style="text-align: right;">Page 41</p> <p>1 was Hernan -- talked about that is a</p> <p>2 disservice, because, of course, when we are</p> <p>3 doing observational epidemiology, when</p> <p>4 we're looking at risk factors, we are</p> <p>5 trying to identify causes of disease.</p> <p>6 And -- so this literature actually</p> <p>7 advocated more use of what he termed as the</p> <p>8 "C-word."</p> <p>9 But generally, it is more common</p> <p>10 that -- described we observed increased</p> <p>11 risk, for example, with talc use in ovarian</p> <p>12 cancer.</p> <p>13 BY MS. DAVIDSON:</p> <p>14 Q. So that's a "no," you have never</p> <p>15 actually published a paper outside this litigation</p> <p>16 that states talc causes ovarian cancer --</p> <p>17 MS. PARFITT: Objection.</p> <p>18 BY MS. DAVIDSON:</p> <p>19 Q. -- correct?</p> <p>20 MS. PARFITT: She's answered the</p> <p>21 question.</p> <p>22 MS. DAVIDSON: You -- you interrupted</p> <p>23 me.</p> <p>24 MS. PARFITT: Sorry about that. Are</p> <p>25 you done? Object --</p>

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1 BY MS. DAVIDSON:
 2 Q. Do you need me to repeat the question
 3 since it was interrupted?
 4 A. Please repeat the question.
 5 MS. DAVIDSON: Can you repeat it?
 6 (The following question was read back:
 7 Q: So that's a "no," you have never
 8 actually published a paper outside this
 9 litigation that states talc causes ovarian
 10 cancer, correct?)
 11 MS. PARFITT: Objection. Asked and
 12 answered.
 13 THE WITNESS: I -- I believe that I
 14 did answer the question that I --
 15 BY MS. DAVIDSON:
 16 Q. Okay. So Michelle's objections are
 17 for the record. They're not intended to coach --
 18 they are not supposed to coach you in your answer.
 19 I'm -- I'm allowed to ask the question
 20 differently, and I want to make sure I have your
 21 testimony clear. So can you please answer the
 22 question?
 23 A. Okay.
 24 MS. PARFITT: Objection.
 25 THE WITNESS: I do not recall writing

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1 a paper outside of this litigation where I
 2 said that talc causes ovarian cancer.
 3 BY MS. DAVIDSON:
 4 Q. Thank you. We can move on, then.
 5 Could you remind me the name of the
 6 lawyer who you worked with on your 2021 report?
 7 A. His name was Steve Faries, spelled
 8 F-A-R-I-E-S.
 9 Q. And were the MDL lawyers involved at
 10 all in that report?
 11 A. The only person I recall speaking with
 12 on that was Mr. Faries.
 13 Q. Did you share that report with MDL
 14 lawyers in 2021?
 15 A. I did not.
 16 Q. When did you first share that report
 17 to MDL lawyers?
 18 A. Probably sometime in 2023. I had
 19 essentially no contact with the MDL lawyers while
 20 all the bankruptcy stuff was going on.
 21 Q. Did you follow the bankruptcy in the
 22 class?
 23 A. I read some news articles about it.
 24 Yes, I did.
 25 Q. So your first MDL report was dated

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1 2018, I think; is that right? 2018?
 2 MS. PARFITT: November 16th, 2018.
 3 THE WITNESS: That sounds right.
 4 BY MS. DAVIDSON:
 5 Q. Have you conducted a new Bradford Hill
 6 analysis since then?
 7 MS. PARFITT: Objection. Form.
 8 You can answer.
 9 THE WITNESS: No. I -- there has been
 10 some additions to the data, but generally,
 11 I think that the new data support the
 12 conclusions that I -- that I made from that
 13 original Bradford Hill analysis.
 14 BY MS. DAVIDSON:
 15 Q. But there's nowhere I can go to see a
 16 revised or updated Bradford Hill analysis, right?
 17 A. No.
 18 MS. PARFITT: Objection. Form.
 19 BY MS. DAVIDSON:
 20 Q. Okay. I see you brought two binders
 21 today.
 22 A. Yes.
 23 Q. What are those binders?
 24 A. These binders contain the updated
 25 reports, the one from 2021, the one from 2023 and

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1 the -- largely, the articles that were cited or
 2 some papers that I was aware of that had been
 3 published since 2019.
 4 Q. And who put those binders together?
 5 A. They were put together by Michelle's
 6 office. You know, I had provided largely -- you
 7 know, these were the articles, and they -- they
 8 assembled the binders.
 9 Q. And do you have notes in there?
 10 A. No, I do not.
 11 Q. Do you have an updated list of
 12 materials considered?
 13 A. A complete merging what -- from
 14 everything from the --
 15 Q. Everything you've considered in the
 16 MDL proceeding.
 17 A. I have this list of references that
 18 are in these binders. It is not combined into a
 19 single list with what I had -- had previously been
 20 submitted back when I have been deposed
 21 previously.
 22 MS. PARFITT: And for the record,
 23 Jessica, there were probably two Dropboxes.
 24 One back in 2018, when she was deposed in
 25 2019, we provided a very complete Dropbox

<p style="text-align: right;">Page 46</p> <p>1 of all the articles. And then again in 2 2023, we've also provided you with a 3 Dropbox of all the articles -- 4 MS. DAVIDSON: But you don't have a 5 list? You never put them on a list. 6 MS. PARFITT: It is a list. It is a 7 list. If you go to your -- if you go to -- 8 MS. DAVIDSON: It's not a list. It's 9 just a bunch of articles, according to 10 Asher. 11 MS. PARFITT: Well, it's -- 12 MS. DAVIDSON: I mean, we made our own 13 list. 14 MS. PARFITT: Well, it's -- it's -- I 15 would call it a list. Our office put 16 together a list. What you have in that 17 Dropbox is a collection of articles. 18 MS. DAVIDSON: But you don't have a 19 piece of paper that says "Materials 20 Reviewed" like we usually do for an expert. 21 MS. PARFITT: It was a Dropbox. I 22 didn't prepare it. It was a Dropbox of all 23 the articles. Maybe it didn't have perfect 24 titles to -- I mean, didn't have a specific 25 title --</p>	<p style="text-align: right;">Page 48</p> <p>1 neutral author than one published by a defense 2 expert? 3 MS. PARFITT: Objection. 4 THE WITNESS: I will tell you what I 5 taught my students when I would teach them 6 how to read a paper and going through the 7 various parts of the paper, including the 8 acknowledgments, the funding sources. 9 I said, if there is some mention of, 10 like, a drug study funded by Big Pharma or 11 someone working as a consultant, it is 12 important to note that, but they should not 13 disregard the findings of that paper just 14 on that basis. 15 They should do -- just look at it like 16 any other paper, the methodology, how they 17 report the findings, their interpretation 18 of the findings. And if there is anything 19 that seems concerning, they should take 20 that into account, but it's not a reason to 21 discount the findings from a paper. 22 BY MS. DAVIDSON: 23 Q. Do you give any more weight when 24 you're reviewing a study to one where the authors 25 don't have any ties to litigation?</p>
<p style="text-align: right;">Page 47</p> <p>1 MS. DAVIDSON: We couldn't find, like, 2 a materials reviewed list. 3 MS. PARFITT: Gotcha. Okay. I 4 think -- 5 MS. DAVIDSON: If there was one, 6 that's what I'm asking. 7 MS. PARFITT: Yeah, I don't believe 8 there was. 9 MS. DAVIDSON: Okay. 10 MS. PARFITT: It was just a Dropbox of 11 all the materials. I think that's what we 12 received from you-all as well, not always 13 an assembly of a list of them in addition 14 to the documents. 15 BY MS. DAVIDSON: 16 Q. Do you agree that whenever you're 17 reviewing scientific literature it's important to 18 know potential sources of bias? 19 A. Yes, it is important to consider 20 potential sources of bias. Yes. 21 Q. Are conflicts of interest a potential 22 source of bias? 23 A. A potential source of bias, yes. 24 Q. All things being equal, would you have 25 fewer bias concerns with a paper published by a</p>	<p style="text-align: right;">Page 49</p> <p>1 A. I think that I look at the 2 methodology. I -- I just look at -- that weighs 3 more than any of the -- you know, who it's funded 4 by or anything. Is their methodology, their 5 interpretation appropriate? That's what I give 6 weight to. 7 Q. Did you numerically assign grades to 8 the various epidemiological studies on talc? 9 A. Did I assign grades to -- 10 Q. What grades or weights -- like, is -- 11 is there a way for me to know how you weighed each 12 study, like a quantitative weighing? 13 A. No. I -- I did not. 14 Q. So someone reading your report -- is 15 there a way for someone reading your report to 16 know which studies you assigned more weight to and 17 which studies you assigned less weight to? 18 MS. PARFITT: Objection. 19 THE WITNESS: I provided a narrative 20 of what I considered strengths and 21 limitations of the studies, and if I had 22 concerns about a study, I tried to use -- I 23 tried to explain why I had concerns about a 24 given study. 25 BY MS. DAVIDSON:</p>

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1 Q. Are you aware of any letter to the
 2 editor of any scientific journal about talc and
 3 ovarian cancer written by somebody who's not
 4 plaintiff's expert?
 5 MS. PARFITT: Objection.
 6 THE WITNESS: I have seen some letters
 7 to the editor like that, yes.
 8 BY MS. DAVIDSON:
 9 Q. And can you recall what they are?
 10 A. Right offhand, I can't recall the
 11 authors, no, not off the top of my head.
 12 Q. When do you recall seeing a letter to
 13 the editor of a journal involving talc and ovarian
 14 cancer that was not written by a plaintiff's
 15 expert?
 16 MS. PARFITT: Asked and answered.
 17 THE WITNESS: I'm -- you're asking me
 18 to recall when and -- I mean, I read the
 19 literature on a routine basis. When did
 20 I -- I see it? I -- I don't know. I can't
 21 give an answer to that.
 22 BY MS. DAVIDSON:
 23 Q. But you're confident that such a
 24 letter exists?
 25 A. I feel like I have read letters to the

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1 editor, yes, yeah.
 2 Q. You feel like you have read letters to
 3 the editor that were not by a plaintiff's expert?
 4 A. Yes.
 5 Q. Do you recall whether any of the
 6 letters involving the O'Brien paper involved
 7 plaintiffs' experts? I'm sorry. That was not a
 8 good question.
 9 Do you recall whether anyone who is
 10 not a plaintiff's expert has written a letter to
 11 the editor regarding O'Brien?
 12 A. I -- I don't -- I don't recall. I
 13 just -- I don't know. And, you know -- and, also,
 14 there are numerous -- more than one paper by
 15 O'Brien, and so I don't know --
 16 Q. Any O'Brien paper. Do you know
 17 whether anybody has ever written a letter to an
 18 editor with respect to any O'Brien paper who is
 19 not a plaintiff's expert?
 20 MS. PARFITT: Objection.
 21 THE WITNESS: I don't know the answer
 22 to that.
 23 BY MS. DAVIDSON:
 24 Q. Is O'Brien an expert in this
 25 litigation?

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1 A. O'Brien? I truly do not know the full
 2 list of experts. I don't -- to my knowledge, she
 3 is not, but I don't know.
 4 Q. When you read the O'Brien, Wentzensen
 5 papers, did you look to see whether they had any
 6 conflicts of interest?
 7 A. I probably did when I read the paper.
 8 That's part of what I typically do. I don't
 9 recall whether they reported any conflicts of
 10 interest. At this moment, I don't recall.
 11 Q. Would that have weighed into your
 12 evaluation of the O'Brien, Wentzensen papers?
 13 MS. PARFITT: Objection. Form.
 14 THE WITNESS: It is just -- as I
 15 stated before, that is a factor that is
 16 considered, but it is not -- if it's a good
 17 paper, it doesn't matter. I mean, if, you
 18 know, there -- I would, again, review the
 19 methodology, how they described results,
 20 their interpretation of it, and that would
 21 be -- drive my opinion more so than who
 22 might be supporting any of the work or any
 23 potential conflicts of interest.
 24 BY MS. DAVIDSON:
 25 Q. Had you heard of Dr. O'Brien before

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1 this litigation?
 2 A. If I'm not mistaken, she might have
 3 done her Ph.D. work at UNC. I'm not absolutely
 4 sure. And so I think I might have seen her name
 5 sometime along -- along the way as, like, a
 6 doctoral student. But I can't -- I'm not --
 7 Q. Do you have any reason to think she's
 8 biased?
 9 MS. PARFITT: Objection.
 10 THE WITNESS: Do I have any reason to
 11 think she's biased? I have never met her,
 12 talked about -- I've only seen her --
 13 what -- I only know her through the work
 14 that she has published.
 15 BY MS. DAVIDSON:
 16 Q. So you have no basis to doubt her
 17 credibility?
 18 MS. PARFITT: Objection.
 19 THE WITNESS: I said I -- I don't know
 20 her personally. I only know some of the
 21 papers that she has written, so...
 22 BY MS. DAVIDSON:
 23 Q. Are you familiar with Dr. Wentzensen?
 24 A. I -- again, I might have met him at
 25 some meeting years ago, but I don't know him

<p style="text-align: right;">Page 54</p> <p>1 personally. I know some of his work. I've read 2 his papers over the years. 3 Q. Do you have any reason to believe that 4 Dr. Wentzensen is biased? 5 A. Again, I do not know him personally. 6 I only know him for his work. I have no basis to 7 make that judgment. 8 Q. Are you familiar with JAMA? 9 A. I'm sorry? 10 Q. Are you familiar with JAMA? 11 A. JAMA, the journal? 12 Q. (Nods head.) 13 A. Yes. 14 Q. Is JAMA considered a prestigious 15 publication? 16 A. Yes, it's a very well-regarded 17 journal. 18 Q. Are you offering any opinions in this 19 litigation about subtypes of ovarian cancer? 20 A. My -- my opinion is to -- related to 21 ovarian cancer overall. I certainly am aware of 22 some data on subtypes that has been published, but 23 my opinion is related to ovarian cancer overall. 24 Q. So are you offering opinions 25 specifically, for example, about clear cell?</p>	<p style="text-align: right;">Page 56</p> <p>1 Q. Sitting here in 2024, do you believe 2 there is sufficient scientific data from which to 3 conclude that talc use can cause clear cell 4 carcinoma? 5 A. Most of the papers addressed ovarian 6 cancer overall, epithelial ovarian cancer as a 7 whole. And that is what my opinion is based on. 8 MS. DAVIDSON: Can you repeat the 9 question? 10 BY MS. DAVIDSON: 11 Q. I don't think you answered the 12 question as asked. 13 MS. PARFITT: Disagree. 14 (The following question was read back: 15 Q: Sitting here in 2024, do you 16 believe there is sufficient scientific data 17 from which to conclude that talc use can 18 cause clear cell carcinoma?) 19 THE WITNESS: I believe that there is 20 sufficient evidence that talc can cause 21 ovarian cancer. What has been reported in 22 the literature is mostly focused on 23 epithelial ovarian cancer as a whole. 24 The -- that's -- I mean, that's what I have 25 based my opinion on. I have not expressed</p>
<p style="text-align: right;">Page 55</p> <p>1 A. I -- I said my opinion is related to 2 epithelial ovarian cancer overall. 3 Q. Do you have an opinion as to whether 4 there's sufficient data to conclude that talc use 5 can cause clear cell cancer? 6 MS. PARFITT: Objection. This was 7 addressed -- you tell me if it wasn't, 8 Jessica; and I'm going to try to limit 9 these objections as well -- back at the 10 time of her original deposition where she 11 was exhaustively, another eight-hour 12 deposition, asked about risk factors. And 13 I've let you talk about those. You made 14 them relevant, but certainly about the 15 subtypes. 16 MS. DAVIDSON: There's been four 17 years -- 18 MS. PARFITT: So I'm not sure where 19 you're going. 20 MS. DAVIDSON: I'm going to the fact 21 that there's been four years of litigation. 22 BY MS. DAVIDSON: 23 Q. So sitting here in 2024 -- 24 MS. DAVIDSON: I'm sorry. Of science. 25 BY MS. DAVIDSON:</p>	<p style="text-align: right;">Page 57</p> <p>1 an opinion specifically about clear cell. 2 BY MS. DAVIDSON: 3 Q. Do you know how many bellwether 4 plaintiffs there are -- 5 MS. PARFITT: I'm sorry. I didn't -- 6 BY MS. DAVIDSON: 7 Q. -- in this litigation? 8 A. Please -- 9 MS. PARFITT: I -- I didn't hear you, 10 Jessica. 11 THE WITNESS: Your -- 12 BY MS. DAVIDSON: 13 Q. Do you know how many bellwether 14 plaintiffs there are in this litigation? 15 A. I'm not sure. I really don't know for 16 sure. 17 Q. Have you reviewed any materials 18 regarding the actual plaintiffs in this 19 litigation? 20 A. No, I have -- I have not. 21 Q. Do you know what subtypes of ovarian 22 cancer the -- the six bellwether plaintiffs -- 23 there are six -- have been diagnosed with? 24 A. Okay. I just told you that I have not 25 received -- or I have not reviewed any of the</p>

<p style="text-align: right;">Page 58</p> <p>1 individual information on those, you now tell me, 2 six women. So, obviously, I do not know what type 3 of ovarian cancer they had. 4 Q. And you also don't know how long they 5 claim to have used Johnson's Baby Powder? 6 A. Once again, I have not reviewed any 7 specific information about those patients. 8 Q. All right. Let's look at O'Brien 9 2020, which we're going to mark as Exhibit 2. 10 (MOORMAN EXHIBIT 2, JAMA - Association 11 of Powder Use in the Genital Area With Risk 12 of Ovarian Cancer, was marked for 13 identification.) 14 BY MS. DAVIDSON: 15 Q. Why don't you just use the one that 16 we're -- 17 A. Okay. 18 Q. -- for the record. 19 A. All right. I'm happy to do so. 20 MS. DAVIDSON: Michelle, do you want 21 one, or you've got your own? 22 MS. PARFITT: I'm just keeping a 23 little collection here. 24 (Off-the-record conference.) 25 BY MS. DAVIDSON:</p>	<p style="text-align: right;">Page 60</p> <p>1 risk of 1.0. 2 Q. So that's not an association? 3 MS. PARFITT: Objection. 4 THE WITNESS: Correct. 5 BY MS. DAVIDSON: 6 Q. You would agree that there's no 7 association in this paper between long-term talc 8 use and ovarian cancer for patent women only, 9 right? 10 A. As we have pointed out many times in 11 reports, long-term use can reflect a variety of 12 patterns of use. It could be a couple of times a 13 year on really hot summer days over 20 years. But 14 it doesn't tell you how frequently they used it. 15 And so, ideally, you would like to 16 have some measure that was a measure of the total 17 exposure, which would be a combination of the 18 years of use and the frequency of use. 19 Q. Do you recall my question? 20 A. I -- you answered -- I believe that I 21 answered that it showed -- 22 MS. DAVIDSON: What was my question? 23 Can you repeat it, because the answer 24 didn't relate to the question? 25 MS. PARFITT: Objection.</p>
<p style="text-align: right;">Page 59</p> <p>1 Q. How many women in total were included 2 in the O'Brien paper? 3 A. How many people in total? 4 Q. A cohort sample? 5 A. The total size of the cohort, that's 6 reported in Table 1, and it was 257,044 women. 7 Q. And if we could look at Table 2. What 8 was the adjusted hazard ratio for exposure to talc 9 and the development of ovarian cancer? 10 A. For all women, it was -- the hazard 11 ratio was 1.08. For women with a patent 12 reproductive tract, 1.13. 13 Q. And if we're looking at the top half 14 of Table 2, "Ever Use Powder in the Genital Area," 15 are any of those adjusted hazard ratios 16 statistically significant? 17 A. No, they are not. 18 Q. Did you include this breakdown by 19 cohort in your report? 20 A. I did not report it for each cohort, 21 no. I -- I reported the overall. 22 Q. Did the authors find a significant 23 association between long-term talc use and ovarian 24 cancer for patent women? 25 A. They reported an adjusted relative</p>	<p style="text-align: right;">Page 61</p> <p>1 (The following question was read back: 2 Q: You would agree that there's no 3 association in this paper between long-term 4 talc use and ovarian cancer for patent 5 women only, right?) 6 THE WITNESS: Okay. I already -- 7 MS. PARFITT: Asked and answered. 8 THE WITNESS: I answered the question 9 that the relative risk was 1, which was no 10 association. 11 BY MS. DAVIDSON: 12 Q. Thank you. 13 MS. PARFITT: Wait. Have you 14 finished? 15 BY MS. DAVIDSON: 16 Q. Did you include that in your report? 17 A. I don't believe that I did. 18 Q. Okay. Have you looked at Table 4 of 19 O'Brien? 20 A. I have. 21 Q. I'm sorry? 22 A. I have looked at it. 23 Q. And what does Table 4 address? 24 A. This addresses the relationship 25 between talc use and ovarian cancer by various</p>

<p style="text-align: right;">Page 62</p> <p>1 subcategories of ovarian cancer. And they limited 2 it to all medically confirmed cases. And so they 3 looked at it by invasiveness, by tumor location, 4 histotype and then another categorization of 5 histotype. 6 Q. If you looked at all medically 7 confirmed cases, what was the hazard ratio for 8 frequent use? 9 A. It was 1.05. 10 Q. With a confidence interval of? 11 A. .92 to 1.20. 12 Q. Is that statistically significant? 13 A. It is not. 14 Q. Did you include in your report any 15 discussion of Table 4? 16 A. I don't believe that I did. 17 Q. And did you include in your report any 18 discussion of O'Brien's subset analysis with 19 respect to histotypes? 20 A. I don't believe that I did in that 21 report. 22 Q. Does O'Brien find a statistically 23 significant hazard ratio for any histological 24 subtype? 25 A. Within the subtypes, they found</p>	<p style="text-align: right;">Page 64</p> <p>1 not only the sample size, but also the number of 2 cases. That's a very important consideration when 3 considering cohort studies. 4 Q. How many cases were there in O'Brien? 5 A. Overall, there were 2,213 cases. The 6 number of cases by cohort varied considerably. In 7 the Nurses' Health Study II, despite having 61,000 8 women in the cohort, there were only 76 cases. 9 The bulk of the cases came from the Nurses' Health 10 Study. It was 1,258. 11 Q. Have you conducted a power analysis of 12 this paper? 13 A. I have not. 14 Q. Do you recall in your 2018 report that 15 you criticized some of the cohort studies for 16 having what you believe to be was insufficient 17 follow-up time? 18 A. I think that that was a comment that I 19 made, yes. 20 Q. Did you, in your updated report, 21 address the fact that O'Brien added several years 22 of follow-up time for each of those cohort 23 studies? 24 A. I did not specifically address that in 25 my report, no.</p>
<p style="text-align: right;">Page 63</p> <p>1 relative risk greater than 1 for serous, 2 endometrioid, mucinous, and clear cell, but the 3 confidence intervals for each of those included 1. 4 So they were not statistically significant. 5 Q. Fair to say there isn't a single 6 statistically significant hazard ratio in Table 4? 7 A. No. All of the confidence intervals 8 in this table include 1. 9 Q. Do you believe that larger sample 10 sizes make a study more reliable? 11 A. In and of itself, sample size alone 12 does not make a reliable study. You can have a 13 very good large study. You can have a really poor 14 large study. It's just one -- 15 MS. PARFITT: Please let her finish. 16 THE WITNESS: It's just one 17 consideration in evaluating the study. 18 BY MS. DAVIDSON: 19 Q. I totally understand. But is larger 20 sample size a strength that you would note when 21 you're discussing a study? 22 A. It's something that would be 23 considered. And larger sample sizes are 24 generally -- generally desirable. But, again, 25 in -- you have to consider -- you have to consider</p>	<p style="text-align: right;">Page 65</p> <p>1 Q. Do you consider the longer follow-up 2 time to be a strength of the O'Brien paper? 3 A. In general, longer follow-up is more 4 desirable. It's one factor that is considered in 5 evaluating cohort studies. 6 Q. So is that a strength of the O'Brien 7 paper, that it has longer follow-up for each of 8 the cohort studies? 9 A. As compared to the original reports, 10 it could be a strength, yes. 11 Q. How many years of follow-up does 12 O'Brien have, for example, for NHSI? 13 MS. DAVIDSON: For you, "NHSI," 14 Nurses' Health Study I. 15 THE WITNESS: For the Nurses' Health 16 Study, they report a median follow-up time 17 of 33 years. 18 BY MS. DAVIDSON: 19 Q. How about for WHI, Women's Health 20 Initiative? 21 A. Yes, "WHI" is Women's Health 22 Initiative. They report median follow-up time of 23 17 years. 24 Q. How much weight do you give findings 25 that are slightly above 1.0 if the confidence</p>

<p style="text-align: right;">Page 66</p> <p>1 interval crosses 1.0?</p> <p>2 A. I apologize. It is --</p> <p>3 Q. Do you want to take a minute, or are</p> <p>4 you okay?</p> <p>5 A. If you don't mind, just --</p> <p>6 MS. PARFITT: You want to do that just</p> <p>7 get your voice.</p> <p>8 THE WITNESS: Yeah.</p> <p>9 BY MS. DAVIDSON:</p> <p>10 Q. Yes. Do you want to answer this</p> <p>11 question and then take a minute, just because we</p> <p>12 have a question pending?</p> <p>13 A. Okay. So please repeat the question.</p> <p>14 Q. Okay. If you don't remember the</p> <p>15 question, we can take a break and then do it.</p> <p>16 A. Okay. Thank you.</p> <p>17 MS. DAVIDSON: No problem.</p> <p>18 * * *</p> <p>19 (Whereupon, there was a recess in the</p> <p>20 proceedings from 10:29 a.m. to 10:52 a.m.)</p> <p>21 * * *</p> <p>22 BY MS. DAVIDSON:</p> <p>23 Q. Do you know Dr. Clarke-Pearson?</p> <p>24 A. Only by reputation. I might have met</p> <p>25 him many years ago, but I don't know him</p>	<p style="text-align: right;">Page 68</p> <p>1 significant, there is no association.</p> <p>2 BY MS. DAVIDSON:</p> <p>3 Q. Are you aware of any medical journal</p> <p>4 that does not require authors to include a</p> <p>5 confidence interval in their epidemiological</p> <p>6 studies?</p> <p>7 A. Some journals -- and, again, right off</p> <p>8 the top of my head, I can't name which -- what are</p> <p>9 the standards for each journal. Some will report</p> <p>10 only P values, but it is pretty common that</p> <p>11 either -- that some measure of statistical</p> <p>12 significance is included.</p> <p>13 Q. You're not aware of any paper that</p> <p>14 doesn't require authors to indicate statistical</p> <p>15 significance?</p> <p>16 A. You know, again, you're asking me</p> <p>17 about the universe of journals, and I -- I just</p> <p>18 don't know exactly what all their requirements</p> <p>19 are. I have stated that the most common thing is</p> <p>20 that confidence intervals or sometimes P values</p> <p>21 are reported.</p> <p>22 Q. I'm just getting at the fact that you</p> <p>23 said the most common. So I wasn't sure if you</p> <p>24 were aware of anybody -- of any journal that</p> <p>25 operates differently.</p>
<p style="text-align: right;">Page 67</p> <p>1 personally.</p> <p>2 Q. I guess this is a bigger town than I</p> <p>3 think.</p> <p>4 MS. DAVIDSON: I forgot the question I</p> <p>5 had asked that was pending when we took our</p> <p>6 break for the coughing. Can you repeat the</p> <p>7 question?</p> <p>8 (The following question was read back:</p> <p>9 Q: How much weight do you give</p> <p>10 findings that are slightly above 1.0 if the</p> <p>11 confidence interval crosses 1.0?)</p> <p>12 THE WITNESS: I think that</p> <p>13 primarily --</p> <p>14 (Brief interruption.)</p> <p>15 (Off-the-record conference.)</p> <p>16 THE WITNESS: So when I look at</p> <p>17 findings, it is -- I look at the point</p> <p>18 estimate, the hazard ratio, relative risk,</p> <p>19 odds ratio, and that tells the association</p> <p>20 in that study.</p> <p>21 Statistical significance is something</p> <p>22 that I look at. But I certainly do not</p> <p>23 fall into the dichotomy that something is</p> <p>24 statistically significant, that's an</p> <p>25 association, and if it's not statistically</p>	<p style="text-align: right;">Page 69</p> <p>1 A. I can't think of any journal right</p> <p>2 offhand.</p> <p>3 Q. Okay. Why don't we mark your 2023</p> <p>4 report as Exhibit 3.</p> <p>5 All right. Asher has corrected me,</p> <p>6 and he thinks I want to mark as Exhibit 3 your</p> <p>7 2021 supplemental report. He's convenient to have</p> <p>8 around.</p> <p>9 (MOORMAN EXHIBIT 3, Addendum to Rule</p> <p>10 26 Expert Report of Patricia G. Moorman,</p> <p>11 MSPH, Ph.D. dated 11/16/18, Date:</p> <p>12 April 21, 2021, was marked for</p> <p>13 identification.)</p> <p>14 BY MS. DAVIDSON:</p> <p>15 Q. We're marking as Exhibit 3 a 2021</p> <p>16 report addendum to Rule 26 expert report of</p> <p>17 Patricia Moorman.</p> <p>18 In your 2021 paper, you have a</p> <p>19 statement that the result of nondifferential</p> <p>20 misclassification is generally a bias toward the</p> <p>21 null. Can you explain what you meant by that?</p> <p>22 A. Okay. So nondifferential</p> <p>23 misclassification usually refers to an error in</p> <p>24 classifying, for example, an exposure. But it is</p> <p>25 not different between people who -- like in a</p>

<p style="text-align: right;">Page 70</p> <p>1 cohort study, it's not different between women -- 2 people who go on to develop the disease of 3 interest and those who do not. And so it's -- 4 just kind of reflects that there's going to be 5 errors in recall. 6 If I ask anybody about something that 7 happened 10 years ago, 5 years ago or 20 years 8 ago, they will not have perfect recall. And so 9 there will be some misclassification of the 10 exposure. But if it's not different, you know, 11 between people who ultimately go on to develop -- 12 who become a case versus people who do not become 13 a case, that's considered nondifferential. 14 BY MS. DAVIDSON: 15 Q. And why would that bias toward the 16 null? 17 A. Just mathematically you can show that 18 if it is. 19 Q. Because there's more case -- there's 20 more -- because there's fewer people with cases; 21 is that what you're saying? 22 A. No, that's really not it. It's kind 23 of like if you were -- I'm trying to think how to 24 do -- it's kind of putting people in the wrong 25 category.</p>	<p style="text-align: right;">Page 72</p> <p>1 misreporting of exposure or misclassification of 2 exposure can occur for a number of reasons. And 3 I'll give a couple of examples from the various 4 studies. 5 The sister study, their questionnaire 6 asked about use in the previous 12 months when 7 they were enrolled into the study and also when 8 they were -- the women were young. I think it was 9 10 to 13. And I believe that's the measure that 10 they used in this. 11 So anyone who had used talc starting 12 after they were 13 but discontinued it before they 13 enrolled in the study, that would not have been 14 captured. 15 Q. And when you say "that would not have 16 been captured," that -- that would not have been 17 captured in O'Brien, that would not have been 18 captioned in Gonzalez, or did O'Brien and Gonzalez 19 use the same metric? 20 A. I was talking about the sister study, 21 specifically. So that was -- I -- if I'm 22 recalling correctly, the measure that they used in 23 this -- the data that they used in the O'Brien 24 study used both the age 10 to 13 and the age -- in 25 the 12 months before enrollment into the cohort.</p>
<p style="text-align: right;">Page 71</p> <p>1 So you have -- it's a little bit of a 2 mixing of effect. Some people who were truly 3 exposed are in the nonexposed category and 4 possibly vice versa. And so long as that does 5 not -- so long as that is not differential between 6 cases and controls, it could be shown 7 mathematically that when it is a dichotomous 8 outcome, that is usually a -- rather, a 9 dichotomous exposure, it is biased towards the 10 null. 11 Q. But what is the math that results in 12 that? Like, what is the reason? 13 A. It's basic -- I have seen it. I'm 14 having a hard time explaining. I didn't expect to 15 have to explain this. 16 But just, basically, it shows that it 17 is a mixing of effect, and it can be demonstrated 18 mathematically that it will result in a bias 19 towards the null. I'm sorry that I'm not 20 explaining that better. But it has been 21 demonstrated. It's been in pretty much every epi 22 textbook you would look at. 23 Q. Do you believe that misreporting of 24 exposure was a concern in O'Brien 2020? 25 A. Yes, I -- I do. If we -- so the</p>	<p style="text-align: right;">Page 73</p> <p>1 The Gonzalez paper, their analysis was based on 2 use of talc only in the 12 months before 3 enrollment. 4 Q. So -- so O'Brien -- 5 A. I -- 6 Q. Just if I could continue. 7 The -- so the O'Brien paper included a 8 broader definition of exposure for the sister 9 study than Gonzalez did, correct? 10 A. That is my understanding, yes. 11 Q. Did the hazard ratio change as a 12 result? 13 A. Well, the hazard ratio that they 14 reported here was -- 15 MS. PARFITT: And you're referring to 16 what table? 17 THE WITNESS: Okay. I am referring to 18 Table 2. 19 MS. PARFITT: Thank you. 20 MS. DAVIDSON: Please don't interrupt 21 her. 22 MS. PARFITT: I just needed some 23 guidance myself. 24 MS. DAVIDSON: After she's done with 25 her answer.</p>

<p style="text-align: right;">Page 74</p> <p>1 THE WITNESS: Okay.</p> <p>2 MS. PARFITT: I think it's appropriate</p> <p>3 to get some clarification.</p> <p>4 MS. DAVIDSON: No, it's not.</p> <p>5 THE WITNESS: Okay. So in the</p> <p>6 Gonzalez paper, as I recall, the hazard</p> <p>7 ratio was a real outlier. It was like .73,</p> <p>8 .74, something like that, and here it is</p> <p>9 1.02. So it was a change.</p> <p>10 BY MS. DAVIDSON:</p> <p>11 Q. Do you consider 1.02 to be a positive</p> <p>12 association?</p> <p>13 A. It is greater than 1. And so in that</p> <p>14 sense, it is a positive association. It's -- it's</p> <p>15 very close to the null value, obviously.</p> <p>16 Q. Do you believe that O'Brien found an</p> <p>17 increased risk with talc use and ovarian cancer in</p> <p>18 the sister study?</p> <p>19 A. They reported only a very slight</p> <p>20 increase, 1.02.</p> <p>21 Q. And do you consider 1.02 to be a</p> <p>22 slight increase in risk?</p> <p>23 A. That's what the point estimate says --</p> <p>24 Q. Even if it's -- even if it's not</p> <p>25 statistically significant?</p>	<p style="text-align: right;">Page 76</p> <p>1 THE WITNESS: I -- I think that I have</p> <p>2 answered it. You -- when we look at odds</p> <p>3 ratios, 1 means no increase or no decrease</p> <p>4 in risk. Any values below 1 indicates a</p> <p>5 decrease in risk. 1.02 is above 1. It is</p> <p>6 a very slight increase in risk.</p> <p>7 BY MS. DAVIDSON:</p> <p>8 Q. I understand what you're saying, but</p> <p>9 my question was: Have you ever in a paper stated</p> <p>10 that a 1.02 risk ratio nonstatistically</p> <p>11 significant reflected an increased risk for an</p> <p>12 exposure in a disease?</p> <p>13 A. And I think that I answered it. It's,</p> <p>14 like, I would typically just describe it as, you</p> <p>15 know, this was the odds ratio or risk ratio and</p> <p>16 the confidence interval and indicate, you know, it</p> <p>17 was not a statistically significant increased</p> <p>18 risk.</p> <p>19 Q. Have you read the Gossett editorial in</p> <p>20 JAMA regarding O'Brien?</p> <p>21 A. The Gossett?</p> <p>22 Q. Dana Gossett editorial that came out</p> <p>23 in the same version -- in the same edition of JAMA</p> <p>24 as the O'Brien paper?</p> <p>25 A. I believe that I did read it. It's</p>
<p style="text-align: right;">Page 75</p> <p>1 A. As I said before, the point estimate</p> <p>2 is what those data show in that study. You had</p> <p>3 asked about misclassification in the O'Brien</p> <p>4 study --</p> <p>5 Q. We'll go back to that. I just want --</p> <p>6 A. Okay.</p> <p>7 Q. -- to continue with this.</p> <p>8 A. All right. I just wanted to --</p> <p>9 Q. Have you --</p> <p>10 A. -- let you know that I was not</p> <p>11 finished with that answer.</p> <p>12 Q. Understood.</p> <p>13 Have you ever published a paper in</p> <p>14 which you said that 1.02 was an increased risk?</p> <p>15 A. I -- what is typical is that I will</p> <p>16 report the -- the odds ratio and the confidence</p> <p>17 interval and just what it -- what it is. It's</p> <p>18 like -- it was -- I might describe it as: It was</p> <p>19 not a statistically significant increase in risk.</p> <p>20 Q. My question is different. Have you</p> <p>21 ever characterized, outside of this litigation, a</p> <p>22 1.02 nonstatistically significant risk ratio as an</p> <p>23 increased risk?</p> <p>24 MS. PARFITT: Objection. Asked and</p> <p>25 answered.</p>	<p style="text-align: right;">Page 77</p> <p>1 been quite a while since I have looked at that</p> <p>2 paper.</p> <p>3 Q. That was not, that I could see, on</p> <p>4 your reliance list. Do you know why?</p> <p>5 A. I don't. I mean, I don't remember --</p> <p>6 I mean, I might have overlooked it at the time. I</p> <p>7 just -- I don't remember.</p> <p>8 Q. Okay. Did the O'Brien study find an</p> <p>9 overlap in confidence intervals for the patent and</p> <p>10 nonpatent subgroups?</p> <p>11 A. Let me go to -- for the overall</p> <p>12 adjusted odds ratio that are reported in Table 2</p> <p>13 for all women, it was 1.08 confidence interval.</p> <p>14 .99 to 1.17 for women with patent reproductive</p> <p>15 tracts. It was 1.13 with a confidence interval of</p> <p>16 1.01 to 1.26. So, yes, there is overlap in those</p> <p>17 confidence intervals.</p> <p>18 Q. Does the stratification of women into</p> <p>19 exposed -- does the stratification of women into</p> <p>20 patent and nonpatent groups, is that the same as</p> <p>21 stratifying women into exposed and nonexposed</p> <p>22 categories?</p> <p>23 A. Well, in this case, the main exposure</p> <p>24 of interest is talc. That is the exposure of</p> <p>25 interest here. The patent and not patent are --</p>

<p style="text-align: right;">Page 78</p> <p>1 it's a subgroup. They're subgroups and so a 2 subgroup analysis. It's not the exposure that 3 you're looking at. 4 It's -- if you were thinking of the 5 patency of the reproductive tract as a risk factor 6 for ovarian -- as an exposure, you would say: Are 7 women with patent reproductive tracts at higher 8 risk than those with nonpatent reproductive 9 tracts? 10 Q. That's not my question. My question 11 is: When you stratify women into patent and 12 nonpatent groups, would the nonpatent women -- 13 does that mean none of them were exposed to talc? 14 A. Oh, okay. No, it does not, because 15 it -- the patency is defined as having one of 16 these surgeries, so a tubal ligation or a 17 hysterectomy. And so women have those at 18 different points in their lives. 19 I think that women are typically in 20 their 30s when they have tubal ligations. That's 21 the most common age. And most common age for 22 hysterectomy is in their 40s. So anyone who had 23 used talc before their surgery, they had exposure. 24 They likely had exposure. 25 Q. Have any of the papers addressed when</p>	<p style="text-align: right;">Page 80</p> <p>1 Q. I'm just asking you -- 2 MS. PARFITT: Okay. Jessica -- 3 BY MS. DAVIDSON: 4 Q. Can you finish your answer? 5 MS. PARFITT: -- I've done very well 6 so far. 7 MS. DAVIDSON: Okay. So let's 8 continue. 9 MS. PARFITT: No, no. Let me just 10 say, if she needs the paper, though -- 11 again, we just don't need to have this 12 ruckus. 13 MS. DAVIDSON: Okay. I'm not asking a 14 question about that paper. I'm asking 15 whether -- 16 MS. PARFITT: She said -- 17 MS. DAVIDSON: -- she's aware of any 18 papers that discuss at what age women start 19 using talc. 20 MS. PARFITT: And as she said, "if I 21 could see the paper." If you need the 22 court reporter to read that back, she said, 23 "if I could see the paper." 24 MS. DAVIDSON: Michelle -- 25 MS. PARFITT: Yes.</p>
<p style="text-align: right;">Page 79</p> <p>1 women who use talc in their perineal area 2 typically start, at what age? 3 A. At what age they begin using it? In 4 O'Brien's 2023 paper, they asked about use in -- 5 at various points in their age. Again, if we 6 could pull that up, I can demonstrate what -- what 7 I'm talking about. But as I -- 8 MS. PARFITT: Look at your report. 9 THE WITNESS: Okay. 10 BY MS. DAVIDSON: 11 Q. Wait. Can you just finish your 12 answer? 13 A. Okay. 14 MS. PARFITT: If you can. If you need 15 the report -- 16 MS. DAVIDSON: She was saying 17 something. 18 MS. PARFITT: I -- 19 MS. DAVIDSON: And you keep 20 interrupting her. 21 MS. PARFITT: No, no, no. Jessica -- 22 MS. DAVIDSON: She said, "as I." 23 That's the middle of the sentence, and you 24 interrupted her. 25 BY MS. DAVIDSON:</p>	<p style="text-align: right;">Page 81</p> <p>1 MS. DAVIDSON: -- please don't 2 testify. 3 MS. PARFITT: Jessica, I'm not 4 testifying. I want an accurate record -- 5 MS. DAVIDSON: Okay. 6 MS. PARFITT: -- and I think you do, 7 too. I know the judge does. So that's 8 what we'll ask her. Do you need the paper? 9 MS. DAVIDSON: That's not -- 10 BY MS. DAVIDSON: 11 Q. I'm asking whether you are aware of 12 any papers that address when -- the age at which 13 women start using talcum powder, those women who 14 use it. That's all I'm asking. 15 A. Okay. I am relying on my memory 16 here -- 17 Q. Uh-huh. 18 A. -- of the O'Brien 2023 paper. 19 Q. Okay. 20 A. And I believe that they did question 21 women about their use at various ages. And if I 22 am recalling the paper correctly, and if I could 23 look at the paper, we could confirm that my memory 24 is accurate. Do you mind if I look at that paper? 25 Q. I don't mind at all, but I want to get</p>

<p style="text-align: right;">Page 82</p> <p>1 a list. Like, I have a way of questions that I'm 2 asking. And I'd like to know -- I'd like the full 3 list of papers you recall that address, if any, 4 the ages at which women start using ovarian cancer 5 [sic]. So I don't want to in the middle of a 6 question move on. 7 So can you just tell me the full 8 list -- that was my question -- full list of 9 papers you recall that address the age at which 10 women start using ovarian -- using talcum powder 11 in their perineal area. 12 A. Okay. I recall that the O'Brien 2023 13 paper addressed that in the sister study. I can't 14 recall specifically whether other studies asked 15 about age at first use. It seems like there have 16 been some, but I can't remember specifically which 17 ones. 18 MS. DAVIDSON: Okay. If we could pull 19 up the Gossett editorial, which we're going 20 to mark as Exhibit 3. 21 THE REPORTER: We're on 4. 22 MS. DAVIDSON: 4? Sorry. 23 MR. TRANGLE: 4. 24 MS. DAVIDSON: Oh, right, because as 25 Exhibit 3 we marked the 2021 paper. I</p>	<p style="text-align: right;">Page 84</p> <p>1 A. Yes. 2 Q. Do you see halfway down that paragraph 3 there's a sentence "Thus"? 4 A. Uh-huh. 5 Q. Can you read that sentence? 6 A. Wait. I'm sorry. 7 Q. Can you read aloud the sentence that 8 begins with the word "Thus?" 9 MS. PARFITT: Give her a moment, 10 please. 11 THE WITNESS: Well, I just want to 12 read the context of the paragraph. 13 BY MS. DAVIDSON: 14 Q. It's the fourth sentence. 15 A. Yes, I'm just -- I just want it in the 16 context. 17 MS. PARFITT: Jessica, she's asked for 18 a moment to read it. 19 MS. DAVIDSON: You've told her to ask 20 for a moment to read it, Michelle. 21 MS. PARFITT: No. Actually, I didn't. 22 I didn't. 23 BY MS. DAVIDSON: 24 Q. Are you planning to read the whole 25 paper? Because if so, we'll go off the record.</p>
<p style="text-align: right;">Page 83</p> <p>1 forgot to write that down. I was engrossed 2 in the conversation. 3 (MOORMAN EXHIBIT 4, JAMA - Use of 4 Powder in the Genital Area and Ovarian 5 Cancer Risk, Examining the Evidence, was 6 marked for identification.) 7 BY MS. DAVIDSON: 8 Q. Exhibit 4 is an editorial entitled 9 "Use of Powder in the Genital Area and Ovarian 10 Cancer Risk, Examining the Evidence." Do you 11 recall reading this paper? 12 A. I -- yeah, I -- I believe that I have 13 looked at this editorial. 14 Q. Is there a reason why your report 15 discusses Dr. Cramer's letter about the O'Brien 16 2020 paper but doesn't discuss this editorial? 17 A. I -- I don't -- I mean, like I've 18 said, I read this. I -- I -- there was no 19 particular reason why I did not include it. 20 Just -- no particular reason. 21 Q. If you could turn to Page 30. 22 A. Okay. 23 Q. Halfway down the page that starts with 24 the word "Given." Do you see the paragraph that 25 starts with the word "Given" in the left column?</p>	<p style="text-align: right;">Page 85</p> <p>1 A. No. I just -- you asked about one 2 specific paragraph, and I just wanted to read that 3 paragraph. Okay. And so you asked me to read the 4 sentence beginning with "Thus." 5 Thus, the stratification of the groups 6 as patent and nonpatent does not clearly group 7 women into exposed and nonexposed categories. 8 Q. Do you agree with that? 9 A. I -- yes, I -- my previous answer 10 discussed how women with -- who have had these 11 surgeries could have had exposure before the 12 surgeries, yes. 13 Q. Can you read the next sentence? 14 A. The fact that there are no significant 15 differences in the hazard ratios in the patent 16 (HR, 1.13 [95 percent confidence interval, 1.01 to 17 1.26]) and nonpatent subgroups (hazard ratio .99, 18 [95 percent confidence interval, 0.86 to 1.15]; 19 P value for heterogeneity comparing these 20 subgroups of 1 -- .15) confirms the overall 21 conclusion that there is no demonstrable 22 statistically significant association between use 23 of the powder in the genital area and ovarian 24 cancer risk. 25 Q. Do you agree with that statement?</p>

<p style="text-align: right;">Page 86</p> <p>1 A. That statement is -- it's stating the 2 data that's presented in the -- the table -- or in 3 the paper that the P value for interaction was 4 .15. And so it is not a statistically 5 significant -- wait. "Confirms the overall 6 conclusion that" -- 7 You know, I don't -- I have to say 8 that I don't agree with -- with that statement. 9 They did find a significant association with women 10 who have the patent reproductive tract. And so I 11 don't -- I don't agree with that statement because 12 there is -- there is a statistical significant 13 association with that one subgroup of women. 14 Q. Is she saying there isn't? 15 A. It says there is no demonstrable 16 statistically significant association between use 17 of powder in the genital area and ovarian cancer 18 risk. And so I -- I disagree with that. It's -- 19 I think -- 20 Q. But what's the reason she gives for 21 that statement? 22 A. She's saying that there's no 23 significant difference between the two groups, 24 which in terms of a statistically significant 25 interaction between the two groups, the P value</p>	<p style="text-align: right;">Page 88</p> <p>1 expert in litigation or not. 2 Q. She doesn't disclose any conflict of 3 interest suggesting any involvement in litigation, 4 correct? 5 A. She doesn't describe -- disclose 6 conflict of interest related to talc. It's -- she 7 does disclose other funding. 8 Q. Do you give more weight to Dr. Cramer 9 and Dr. Harlow's letters than you do to the 10 Gossett editorial? 11 A. As I have stated repeatedly today, I 12 consider what is -- what is reported in the paper. 13 And, you know, certainly, knowing any potential 14 conflicts of interest, it's -- it doesn't mean 15 that that -- what they're saying is -- is wrong or 16 right. It's -- I just evaluate it on the comments 17 that they made, the points that they made. 18 Q. And so based on the points that were 19 made in this editorial, you didn't think it 20 merited inclusion in your expert report? 21 MS. PARFITT: Objection. Misstates 22 her testimony. 23 THE WITNESS: As I said, I -- it was, 24 perhaps, an oversight that I -- I didn't 25 include that in my reference list. I -- I</p>
<p style="text-align: right;">Page 87</p> <p>1 of .15, that is an accurate statement. 2 But the fact that you are seeing a 3 statistically significant increased risk in the -- 4 the one group, the women with the patent 5 reproductive tract, I think that does not 6 demonstrate -- there's no demonstrable 7 statistically significant association between use 8 of powder in the genital tract -- or genital area 9 and ovarian cancer risk. 10 Q. Again, you discussed letters to the 11 editor about O'Brien from Drs. Cramer and 12 Dr. Harlow, correct, in your 2023 supplement? 13 A. I did. 14 Q. And you didn't discuss this, correct? 15 A. That is correct. 16 Q. And you're aware that Dr. Cramer and 17 Dr. Harlow are plaintiff's experts, right? 18 A. I am aware of that. 19 Q. Do you know whether Dr. O'Brien is an 20 expert in this litigation? 21 A. You have already asked me that and 22 I -- 23 Q. I'm sorry. I meant Dr. Gossett. 24 A. I do not know who Dr. Gossett is. No, 25 I have -- I don't know if she -- she or he is an</p>	<p style="text-align: right;">Page 89</p> <p>1 read it. I -- I obviously -- I -- I didn't 2 comment on it. 3 BY MS. DAVIDSON: 4 Q. Do you recall testifying at your last 5 deposition that you did not believe the cohort 6 studies had sufficient power and citing a paper by 7 Narod for that proposition? 8 A. I recall making some statement. I 9 don't recall exactly what I stated, but that -- 10 Q. Did you go back to the Narod paper 11 after O'Brien was published in 2020 to see whether 12 the O'Brien paper satisfied what Narod had listed 13 as how many women would be needed to establish 14 sufficient power? 15 A. I did not go back to the Narod paper. 16 Q. You recall in 2019 testifying about 17 the Berg -- B-E-R-G-E-N -- Berga because I think 18 it's a European paper, which had done a power 19 analysis of the cohort studies. Do you recall 20 that? 21 A. I -- I don't recall. I recall 22 mentioning -- or probably addressing, you know, 23 the -- the systematic review's meta-analysis, 24 including the Berg or Berga study. I don't recall 25 exactly the point that you're making.</p>

<p style="text-align: right;">Page 90</p> <p>1 Q. Okay. And I believe you testified 2 earlier that you haven't done any sort of power 3 analysis with respect to O'Brien 2020, right? 4 A. No, I did not do any -- 5 Q. Okay. 6 A. -- power analysis. 7 Q. We can move on now. 8 MS. DAVIDSON: Okay. So let's mark as 9 Exhibit 5 Taher 2019. 10 (MOORMAN EXHIBIT 5, Reproductive 11 Toxicology - Critical review of the 12 association between perineal use of talc 13 powder and risk of ovarian cancer, was 14 marked for identification.) 15 BY MS. DAVIDSON: 16 Q. We're marking as Exhibit 5 a paper 17 entitled "Critical review of the association 18 between perineal use of talc powder and risk of 19 ovarian cancer." First author, Mohamed Kadry 20 Taher. 21 Are you relying on this paper to 22 support your opinions in this case? 23 A. It is one of the articles that I 24 considered, yes. 25 Q. If we could turn to Table 2. Do the</p>	<p style="text-align: right;">Page 92</p> <p>1 what I thought that I heard from you, so... 2 MS. DAVIDSON: I think it was. 3 Can you repeat again? 4 (The reporter read the requested 5 material.) 6 THE WITNESS: Okay. Looking at what 7 the O'Brien paper reported in Table 4 is 8 they reported a -- for ever use of talc, 9 they reported a hazard ratio of 1.17 with 10 confidence interval from .73 to 1.89. So 11 it was not -- it was a non -- 12 nonstatistically significant increased 13 risk. 14 BY MS. DAVIDSON: 15 Q. Thank you. 16 Now, Taher found that 13 out of 24 17 case-control studies showed a statistically 18 significant association, right? If you'd like, I 19 can read that to you. 20 It's on the last sentence of 94, first 21 sentence of 95. 13 out of 24 case-control studies 22 showed a statistically significant association. 23 Do you see that? Did I read that 24 correctly? 25 A. Yes, you did read that.</p>
<p style="text-align: right;">Page 91</p> <p>1 authors here identify an increased risk between 2 talc use and the development of clear cell 3 carcinoma? 4 A. They report -- and based on one study, 5 they report an effect estimate of 0.63 with a 6 confidence interval that goes from .15 to 2.65. 7 So based on this one study, they do not report an 8 increased risk among women with clear cell. 9 Q. And we just discussed and looked at 10 the O'Brien paper, which found no significant 11 association between talc use and clear cell as 12 well. Do you recall that? 13 A. Again, let me -- would you mind 14 restating your question? 15 MS. DAVIDSON: Court Reporter, could 16 you repeat it? 17 (The following question was read back: 18 Q: And we just discussed and looked 19 at the O'Brien paper, which found no 20 significant association between talc use 21 and clear cell as well. Do you recall 22 that?) 23 THE WITNESS: Was that -- I'm sorry. 24 I -- if you don't mind repeating your 25 question because what she read back was not</p>	<p style="text-align: right;">Page 93</p> <p>1 Q. So that means 11 out of 24 2 case-control studies did not show a significant 3 association, right? 4 A. Not a statistically significant 5 increased risk, yes. Although, it is important to 6 look at the point estimates overall, which are -- 7 nearly all of them report point estimates greater 8 than 1. 9 Q. So you consider those studies to be 10 consistent despite the fact that 11 did not show a 11 statistically significant association? 12 MS. PARFITT: Objection. Form. 13 THE WITNESS: As I stated earlier, I 14 do not use statistical significance as a 15 way to dichotomize, yes, there is an 16 association; no, there is not. 17 Look at the point estimate, and from 18 the standpoint that the vast majority of 19 studies show reported point estimates 20 greater than 1 with a majority of them 21 being statistically significant, I would 22 say, yes, the findings are quite 23 consistent. 24 BY MS. DAVIDSON: 25 Q. If you look at Table 2 of Taher. For</p>

<p style="text-align: right;">Page 94</p> <p>1 people who used talc 20-plus years, there is --</p> <p>2 there is no statistically significant association</p> <p>3 with ovarian cancer risk, correct?</p> <p>4 A. What they report is overall risk of</p> <p>5 1.19, the confidence interval from .71 to 1.98.</p> <p>6 So, once again, it's an increased risk that was</p> <p>7 not statistically significant.</p> <p>8 Q. And is that higher or lower than the</p> <p>9 risk ratio reported for women who use talc between</p> <p>10 10 and 20 years?</p> <p>11 A. What they report for women who had</p> <p>12 used it for 10 to 20 years was 1.42. So 1.02 to</p> <p>13 1.99. So statistically significant increased</p> <p>14 risk, and it was a higher point estimate than</p> <p>15 women who had used it for 20-plus years.</p> <p>16 Q. Did you -- did you address that in</p> <p>17 your report?</p> <p>18 MS. PARFITT: Objection. Form.</p> <p>19 THE WITNESS: In my discussion of this</p> <p>20 article --</p> <p>21 BY MS. DAVIDSON:</p> <p>22 Q. I can fix my question, because</p> <p>23 Michelle is right, it wasn't very well stated.</p> <p>24 Did you address in your report that</p> <p>25 women who used talc for 20-plus years did not have</p>	<p style="text-align: right;">Page 96</p> <p>1 A. Yes.</p> <p>2 Q. What is it?</p> <p>3 A. It is a framework for evaluating some</p> <p>4 of the strength of the evidence related -- you</p> <p>5 know, I believe that it's commonly used when doing</p> <p>6 meta-analysis and just combining all of the data</p> <p>7 and looking at the strength of the evidence.</p> <p>8 Q. Did -- have you ever used a GRADE</p> <p>9 framework in your work?</p> <p>10 A. If I'm not mistaken, in some of the</p> <p>11 systematic reviews that I've worked on over the</p> <p>12 years, we might have addressed -- we -- I'm pretty</p> <p>13 sure that we did use the GRADE framework.</p> <p>14 Q. How did Taher classify the talc epi</p> <p>15 under the GRADE framework? Page 98 to make your</p> <p>16 life easier.</p> <p>17 A. Okay. In Table 4, the certainty of</p> <p>18 the evidence, they put it as very low.</p> <p>19 Q. Thanks.</p> <p>20 On Page 98, the author states that one</p> <p>21 reason for that is that they deem the findings to</p> <p>22 be subject to an appreciable risk of bias. Do you</p> <p>23 see that?</p> <p>24 A. Yes, I do see it.</p> <p>25 Q. Do you disagree with them?</p>
<p style="text-align: right;">Page 95</p> <p>1 a statistically significant association with the</p> <p>2 development of ovarian cancer, whereas women who</p> <p>3 used talc for 10 to 20 years had a higher risk</p> <p>4 ratio and that was statistically significant?</p> <p>5 A. I'm looking at how I stated it in my</p> <p>6 report. What I stated in my report was that they</p> <p>7 noted a possible increasing trend in ovarian</p> <p>8 cancer with risks with increasing cumulative</p> <p>9 exposure to talc, albeit with a high degree of</p> <p>10 uncertainty.</p> <p>11 Q. My question was: Did you report --</p> <p>12 did you state in your report that 20-plus years of</p> <p>13 use had a lower effect estimate and one that is</p> <p>14 not statistically significant as compared to 10 to</p> <p>15 20 years?</p> <p>16 A. And I told you what -- what I did</p> <p>17 report in my report. I didn't repeat every --</p> <p>18 every odds or hazard ratio or whatever -- relative</p> <p>19 risk that was reported. I read to you what I</p> <p>20 reported. I did not specifically say that it was</p> <p>21 the odds -- the relative risks for greater than 20</p> <p>22 years was less than what was reported for 10 to 20</p> <p>23 years.</p> <p>24 Q. Do you know what the GRADE framework</p> <p>25 is? G-R-A-D-E, all caps.</p>	<p style="text-align: right;">Page 97</p> <p>1 A. I acknowledge that the -- there is</p> <p>2 potential for recall bias. There is potential for</p> <p>3 bias in recalling -- so the nondifferential</p> <p>4 misclassification of the exposure. I think that</p> <p>5 there is the potential. I think that, as has been</p> <p>6 addressed in several papers, there is some</p> <p>7 evidence to suggest that it's probably not as much</p> <p>8 of a problem as some people suggest.</p> <p>9 Q. Did you address in your paper -- in</p> <p>10 your expert report the fact that the Taher</p> <p>11 meta-analysis finds the quality of the evidence --</p> <p>12 the certainty of the evidence to be very low?</p> <p>13 A. I did not put that in my report.</p> <p>14 Q. Why not?</p> <p>15 A. Basically, I did not restate</p> <p>16 everything that was in the papers I was asked</p> <p>17 to -- you know, it was a rather brief summary.</p> <p>18 Q. Do you think that the fact that the</p> <p>19 authors of this meta-analysis found the certainty</p> <p>20 of the evidence to be very low is relevant to</p> <p>21 analyzing the paper?</p> <p>22 A. It's one aspect of looking at the</p> <p>23 paper.</p> <p>24 Q. But you didn't discuss it?</p> <p>25 A. I did not discuss it.</p>

<p style="text-align: right;">Page 98</p> <p>1 Q. And are any of the authors of Taher 2 plaintiff's experts in this litigation? 3 A. I do not know any of the authors on 4 this paper. And -- so I don't -- and I have never 5 heard their names mentioned as being a plaintiff's 6 expert. 7 Q. And if you look at their conflict of 8 interest disclosure, none of them references any 9 conflict of interest related to this litigation, 10 correct? 11 A. No, I don't -- I don't see that. They 12 report no conflict of interest. 13 Q. Can we look at -- this is -- Michelle 14 likes to say it's not a memory test, but this is a 15 vision test. 16 MS. PARFITT: I have extra glasses. 17 BY MS. DAVIDSON: 18 Q. Could we look at Footnote A. 19 A. What page are you on? 20 Q. Footnote A, Page 98 of Taher. 21 A. Okay. 22 Q. Do you see that? 23 A. Yes, I do. 24 Q. Can you tell me how they describe what 25 "very low certainty" means?</p>	<p style="text-align: right;">Page 100</p> <p>1 Q. Do you know what XRD is? 2 A. I believe that one meaning of it -- 3 I'm not sure if this is what you're getting at -- 4 is X-ray diffraction. 5 Q. That was good. Have you ever done 6 X-ray diffraction? 7 A. No, I have not. 8 Q. Do you know what PLM is? 9 A. I do not. No, I do not know what 10 that -- 11 Q. Since you don't know what it is, can 12 I -- is it fair to conclude that you've never done 13 it? 14 A. Just, please, if you wouldn't mind 15 just stating what it is, and I can -- 16 Q. Polar light microscopy. 17 A. Okay. 18 Q. Have you ever done polar light 19 microscopy? 20 A. No, I have not done PLM. 21 Q. Are you familiar with the term "TEM"? 22 A. Let's see. Again, I think that it's 23 some type of electron microscopy. And I don't 24 remember what the "T" is, but -- 25 MS. PARFITT: Transmission --</p>
<p style="text-align: right;">Page 99</p> <p>1 A. We have very little confidence in the 2 effect estimate. The true effect is likely to be 3 substantially different from the estimate of 4 effect. 5 Q. Again, you didn't mention that in your 6 report, correct? 7 A. No, I did not. 8 Q. Have you seen the unpublished Taher 9 manuscript, the one that was attached to the 10 original Health Canada draft? 11 A. I believe that I saw it several years 12 ago. 13 Q. Did you compare it to the final 14 published version? 15 A. I did not. 16 Q. Do you recall that the unpublished 17 draft had a Bradford Hill analysis in it? 18 A. I don't recall specifically. It's 19 been a long time since I read that paper. 20 Q. Fair. I don't recall what I did last 21 week, so... 22 Are you qualified to identify asbestos 23 in a product? 24 A. Am I qualified to identify asbestos in 25 a product? No. That's not my specialty.</p>	<p style="text-align: right;">Page 101</p> <p>1 MR. TRANGLE: Electron -- 2 MS. PARFITT: -- electron spectro -- 3 (Simultaneous talking.) 4 BY MS. DAVIDSON: 5 Q. Transmission. Y'all -- we -- the 6 three of us all seem to agree that the "T" stands 7 for "transmission." 8 A. Okay. 9 Q. And none of us has ever done it 10 either. 11 A. I have not done TEM. 12 Q. Okay. I just wanted you to get a full 13 sentence out there. 14 A. Okay. 15 Q. Do you have an opinion as to what 16 percentage of the Johnson's Baby Powder sold in 17 the United States has asbestos? 18 A. I know that there will be people who 19 are mineral experts who will address that. I have 20 seen some of their reports, but I cannot state an 21 opinion on what proportion of containers have 22 asbestos in them. 23 Q. Have you ever asked plaintiff's 24 counsel to see the defense expert reports about 25 asbestos testing?</p>

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1 A. I have not.

2 Q. Does your biological plausibility

3 opinion turn on whether talc contains asbestos?

4 A. My biologic plausibility considered

5 asbestos in the talc products as part of the

6 biological plausibility, not the sole biologically

7 plausible mechanism.

8 Q. Do you believe that talc that does not

9 contain asbestos can cause ovarian cancer?

10 A. My opinion is based on talc products,

11 whatever is contained in them. And it -- as far

12 as I know, there is no way to determine whether or

13 not the women -- the talc they reported, whether

14 it contained asbestos or not and -- just because

15 there's no way to -- to test all the products that

16 they used over the years. My opinion, again, to

17 restate, is just based on talc products, whatever

18 they contain.

19 Q. Are you relying on a paper called

20 Harper 2023?

21 A. I have read Harper. That's one of --

22 if -- if you're going to ask me questions about

23 it, could we just bring it up or --

24 Q. Yeah, I'm -- all I've asked is: Are

25 you relying on it?

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1 A. I have read it. And, you know,

2 it's -- as I recall, it's a laboratory study. And

3 since my opinion is based primarily on the

4 epidemiologic data, it's -- like, at a high level,

5 I considered it. It was just part of what I read

6 in forming my opinion.

7 Q. But I can't find a discussion of it

8 anywhere in your reports.

9 A. No, I did -- my reports are focused

10 primarily on the epidemiologic data, which is

11 where my expertise is.

12 Q. Are you aware that the peer-reviewed

13 comments on Harper 2023 were produced in this

14 litigation?

15 A. I was not aware of that.

16 Q. And you're also, presumably, not aware

17 that some of the peer reviewers referred to that

18 paper as outrageous?

19 MS. PARFITT: Objection.

20 THE WITNESS: I told you I have not

21 seen any of that. I am unaware of any of

22 that.

23 BY MS. DAVIDSON:

24 Q. In connection with this litigation,

25 have you seen peer review comments for any papers?

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1 A. As -- the only peer review comments

2 that I would have seen are those from the papers

3 on which I was a co-author.

4 Q. And have you seen any correspondence

5 or other materials related to the Woolen

6 meta-analysis?

7 A. Any correspondence? I don't recall

8 seeing any.

9 Q. I'll mark your 2023 report as

10 Exhibit 6.

11 (MOORMAN EXHIBIT 6, Supplemental

12 Expert Report of Patricia G. Moorman, MSPH,

13 Ph.D., dated 11/15/23, was marked for

14 identification.)

15 BY MS. DAVIDSON:

16 Q. I'm marking as Exhibit 6 a

17 supplemental expert report of Patricia G. Moorman,

18 dated November 15th, 2023.

19 So on Page 1 of your supplemental

20 report dated November 2023, you say you considered

21 the possible biases of -- of the various studies.

22 A. Yes.

23 Q. Where can I find your analysis of the

24 possible biases of the various studies?

25 A. I -- I think that throughout the

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1 report, I did address, you know, some of the

2 potential biases. For example, in the O'Brien

3 2023, I talked about how the underrepresentation

4 of talc exposure in the Gonzalez paper, which was

5 quantified in the O'Brien 2023 paper, really cast

6 serious concerns about the Gonzalez paper.

7 I -- in talking about the -- our own

8 paper, the Davis paper, noted that the available

9 data didn't allow for consideration of both

10 frequency and duration.

11 So throughout the report I think that

12 there are numerous places where I did address some

13 of the biases.

14 Q. Is frequency and duration a bias or a

15 limitation?

16 A. Well, I would consider it more a

17 limitation of the study.

18 Q. So when you refer to bias here, you

19 mean recall bias?

20 A. It was not just recall bias, but

21 misclassification bias as well.

22 Q. And is misclassification a bias or a

23 limitation?

24 A. It -- it can be a bias, yes.

25 Q. And when you say possible biases here,

<p style="text-align: right;">Page 106</p> <p>1 did you -- are you referring at all to author 2 bias? 3 A. My comment there was more in relation 4 to methodologic biases. 5 Q. I wasn't sure. 6 Are you familiar with the term 7 "cleavage fragment"? 8 A. I'm sorry? 9 Q. Are you familiar with the term 10 "cleavage fragment." 11 A. "Cleavage fragment." Again, I believe 12 that I have seen that term in relation to some of 13 the talc analyses. But, again, that is not my 14 area of expertise. 15 Q. So can we agree you're not offering an 16 opinion about cleavage fragments? 17 A. That is correct. 18 Q. That can save us a bunch of questions. 19 A. Okay. 20 Q. Are you offering an opinion as to 21 whether nonasbestiform tremolite can cause ovarian 22 cancer? 23 A. I have already stated that my opinion 24 is based on the talc products, whatever is 25 contained in them.</p>	<p style="text-align: right;">Page 108</p> <p>1 have not offered an opinion about that. 2 Q. Are you familiar with any scientific 3 papers that address amount of exposure to asbestos 4 that's needed to cause ovarian cancer? 5 MS. PARFITT: Objection. Asked and 6 answered. 7 MS. DAVIDSON: Slightly different 8 question. 9 THE WITNESS: Okay. In -- in general, 10 as I've stated previously, there is 11 considered -- asbestos is not considered to 12 have any safe level of exposure. 13 I do not recall a paper that 14 specifically addressed the minimum level. 15 But in theory, it could be any level of 16 exposure to asbestos could cause ovarian 17 cancer. 18 BY MS. DAVIDSON: 19 Q. Well, are you familiar with the term 20 "fibrous talc"? 21 A. Yes, I have heard that term. 22 Q. Are you aware of any literature 23 linking exposure to fibrous talc to the 24 development of ovarian cancer? 25 A. The epidemiologic literature is</p>
<p style="text-align: right;">Page 107</p> <p>1 Q. Do you believe that background levels 2 of asbestos can cause ovarian cancer? 3 MS. PARFITT: Objection. 4 THE WITNESS: How do you define 5 "background levels"? 6 BY MS. DAVIDSON: 7 Q. Do you have an opinion as to whether 8 nonoccupational exposure to asbestos can cause 9 ovarian cancer? 10 MS. PARFITT: Objection. 11 THE WITNESS: I did not specifically 12 offer that opinion. I am aware of 13 organizations, such as IARC, that have 14 concluded that occupational exposure can 15 cause -- to asbestos can cause ovarian 16 cancer. 17 BY MS. DAVIDSON: 18 Q. My question was about nonoccupational 19 exposure. 20 A. Oh, I'm sorry. I'm sorry. I 21 misunderstood you. Nonoccupational exposure to 22 asbestos? I did not offer an opinion about that 23 from the standpoint that numerous organizations 24 have stated that asbestos is a carcinogen and that 25 there is no safe level. It seems plausible, but I</p>	<p style="text-align: right;">Page 109</p> <p>1 addressing talc products. So whatever those 2 products contain, fibrous talc or any -- anything 3 else in those products, that is what is addressed 4 in the studies, and that's what informed my 5 opinions. 6 Q. Do you know what fibrous talc is? 7 A. Again, you're getting more into the -- 8 the area of the people who are specialists in 9 minerals. I have read papers that have described 10 it, but it's certainly not my area of expertise. 11 Q. I'm just asking, do you know what it 12 is? 13 MS. PARFITT: I'm just going to object 14 to the extent this was thoroughly examined 15 at the time of her 2019 deposition. 16 BY MS. DAVIDSON: 17 Q. Do you know what -- 18 (Simultaneous talking.) 19 MS. PARFITT: Okay. So answer that, 20 what the definition is of fibrous talc. 21 (Reporter clarification.) 22 BY MS. DAVIDSON: 23 Q. Do you know what the -- what fibrous 24 talc is? That's simply my question. Do you know 25 what it is or not?</p>

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1 MS. PARFITT: Asked and answered.
 2 MS. DAVIDSON: It wasn't answered.
 3 MS. PARFITT: Objection. Asked and
 4 answered.
 5 THE WITNESS: Again, it is -- I have
 6 read some of the papers describing some of
 7 the mineral analyses, and I have seen that
 8 term repeatedly. I cannot actually
 9 describe, you know, fibrous talc from talc
 10 generally.
 11 BY MS. DAVIDSON:
 12 Q. Have you published any papers on
 13 asbestos?
 14 A. No, I don't -- I don't believe I ever
 15 have.
 16 Q. Have you ever made any presentations,
 17 university, scientific groups, about asbestos?
 18 A. No, I have not.
 19 Q. Can you identify asbestos on a slide?
 20 A. No, I am not a laboratory scientist.
 21 That's just not -- that's outside my area of
 22 expertise.
 23 Q. Have you reviewed any J&J internal
 24 documents?
 25 A. Before my, I guess, 2019 deposition, I

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1 did see some documents that were shared with me,
 2 some of it discussing some analyses of asbestos --
 3 asbestos in the talc products.
 4 Q. Those are documents shared with you by
 5 plaintiff's counsel?
 6 MS. PARFITT: Actually, they were J&J
 7 documents, but --
 8 MS. DAVIDSON: Yeah.
 9 MS. PARFITT: -- I believe so.
 10 MS. DAVIDSON: Yeah.
 11 MS. PARFITT: And they're listed,
 12 again, on her 20 --
 13 MS. DAVIDSON: On the original --
 14 THE WITNESS: Yeah.
 15 MS. PARFITT: -- 2018 report --
 16 MS. DAVIDSON: Okay.
 17 MS. PARFITT: -- and examined --
 18 THE WITNESS: Yeah.
 19 MS. PARFITT: -- in 2019.
 20 BY MS. DAVIDSON:
 21 Q. All right. So maybe a better way to
 22 just move on past this whole topic is: Since your
 23 deposition in 2019, have you looked at any J&J
 24 company documents?
 25 A. No, I don't believe I have.

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1 Q. I'm able to skip a whole page. Who
 2 drafted your 2023 report?
 3 A. Who drafted it? I did.
 4 Q. Did the plaintiff's lawyer send you
 5 any of the scientific materials or you found them
 6 all yourself?
 7 A. I think that it was probably a
 8 combination. I think that nearly all of them I
 9 probably found myself. I believe that a report by
 10 Longo on asbestos -- his analysis of asbestos and
 11 talc, I believe that was one that was shared by
 12 counsel.
 13 Q. I assume you're familiar with a paper
 14 called "Davis 2021"?
 15 A. Yes.
 16 Q. Did you disclose that you were a
 17 plaintiff's expert in conjunction with that paper?
 18 A. I disclosed that I was being paid --
 19 that I was involved in talc litigation and was
 20 being paid for that -- talc -- talc --
 21 Q. Why didn't you disclose which side
 22 you're on?
 23 A. When I first started -- became
 24 involved in this, this was the first time I've
 25 ever had to disclose anything. The phrasing that

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1 I typically use has something along the lines of:
 2 I have received compensation from law firms in
 3 relation to the talc and ovarian cancer
 4 litigation. I have submitted that to the journal.
 5 And I have never had any pushback from the journal
 6 editors about that phrasing, and so that's what I
 7 have stuck with.
 8 Q. So does the disclosure to Davis make
 9 clear that you've received money in connection
 10 with the talc litigation?
 11 A. Yes, it does.
 12 Q. Did you tell the journal that you were
 13 a paid plaintiff's expert in talc litigation?
 14 A. I used the phrasing that I said, that
 15 I have received -- something to the effect that I
 16 have received compensation for work in relation to
 17 the talc and ovarian cancer litigation.
 18 I was not asked by the journal editors
 19 to be more explicit. That's what I -- and so I
 20 assume that that was an acceptable disclosure from
 21 the standpoint of the editors.
 22 Q. And who wrote the author's
 23 disclosures, you or the paper -- or the journal?
 24 A. We -- I -- there are two versions of
 25 the paper, and I -- in the published version, that

<p style="text-align: right;">Page 114</p> <p>1 was what the journal wrote. And then there is the 2 HHS public access version, which is the final 3 submitted manuscript, and that one is -- has the 4 phrasing that I believe that I submitted with this 5 article. 6 Q. So you're saying there's two different 7 author disclosures in two different versions of 8 this article? 9 A. Yeah. So if you -- I mean, I don't 10 know that we have both versions of it, but I know 11 that the -- the phrasing in the published -- 12 published version is not phrasing that I have ever 13 used. And going back to the HHS public access 14 version, it has the phrasing that I typically 15 used. 16 Q. Understood. 17 Do you think that the fact that you're 18 a paid plaintiff's expert should affect the 19 grading or weight assigned to your study? 20 A. As I explained earlier, the -- an 21 informed reader of that paper would look at it and 22 they should evaluate, as they would no matter who 23 the authors are, are there any issues with 24 methodology, interpretation or whatever. 25 I also think that an informed reader</p>	<p style="text-align: right;">Page 116</p> <p>1 paper, "Genital Powder Use and Risk of Epithelial 2 Ovarian Cancer in the Ovarian Cancer in Women of 3 African Ancestry Consortium." 4 And if you look at Table 3, the OR -- 5 A. Okay. I'm going to -- let's see. 6 This -- I have -- 7 Q. We just need to put a sticker on it. 8 This is 7. 9 A. Okay. I want to -- if you're looking 10 at that version, I want to look at it because the 11 one I have in my notebook is the public access 12 version. Okay. So... 13 Q. Let's just finish this question, and 14 then we'll take a break. 15 A. Okay. 16 Q. I think where we were was that the -- 17 according to Table 3, right? 18 A. Uh-huh. 19 Q. The OR. 20 A. Right. Go ahead with your question, 21 please. 22 Q. For African-American women who had 23 ever used a body powder in genital areas and the 24 development of ovarian cancer is not statistically 25 significant, correct?</p>
<p style="text-align: right;">Page 115</p> <p>1 would look at this particular paper and would see 2 that 1 of approximately 15 authors had this 3 disclosure. I was neither the first author nor 4 the senior author on this paper. So I would think 5 that an informed reader would say that it probably 6 had little to no effect on how the data were 7 analyzed and interpreted. 8 Q. The Davis paper did not find a 9 statistically significant association between talc 10 use by African-American women and the development 11 of ovarian cancer, right? 12 A. Once again, let me just pull that 13 paper up. 14 Q. Sure. 15 MS. DAVIDSON: We can mark -- let's 16 mark Davis as Exhibit 7. 17 (MOORMAN EXHIBIT 7, AACR - Genital 18 Powder Use and Risk of Epithelial Ovarian 19 Cancer in the Ovarian Cancer in Women of 20 African Ancestry Consortium, was marked for 21 identification.) 22 BY MS. DAVIDSON: 23 Q. Let me just read the full title for 24 the record. We're marking as Exhibit 7 a 2021 25 paper. First author, C.P. Davis. Title of the</p>	<p style="text-align: right;">Page 117</p> <p>1 A. They report -- we reported an odds 2 ratio of 1.22 with a confidence interval from 3 1. -- or, rather, .97 to 1.53. So it was elevated 4 risk that was not statistically significant. 5 Q. Do you state in your 2023 expert 6 report that Davis did not find a statistically 7 significant association for African-American 8 women? 9 A. I recorded the values as reported. 10 Increased risk of ovarian cancer among the entire 11 studied population for African-American women and 12 for white women, and the confidence intervals are 13 reported there. So, yes, an informed reader will 14 know whether or not those were statistically 15 significant or not. 16 Q. Do African-American women use genital 17 talc more frequently than white women? 18 A. That has been recorded in a number of 19 studies, yes, that -- 20 Q. Did Davis find a dose-response? 21 A. As I stated in my report, based on 22 broad categorizations of either frequency or 23 duration, they did not -- we did not report a 24 dose-response. However, in the paper, we did note 25 that we did not -- because of the availability of</p>

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1 data from the various studies, we did not have a
 2 measure of both frequency and duration that would
 3 allow the most accurate measure of dose.
 4 Q. But just to be clear, there was no
 5 dose-response either for duration or for
 6 frequency, right?
 7 MS. PARFITT: Objection. Asked and
 8 answered.
 9 THE WITNESS: I -- I just answered
 10 that for you. I mean, maybe you could read
 11 back my response. I --
 12 BY MS. DAVIDSON:
 13 Q. You agree that there was no finding of
 14 a dose-response either for duration or frequency,
 15 correct?
 16 MS. PARFITT: Objection. Asked and
 17 answered.
 18 THE WITNESS: Like I said, I did -- I
 19 did state that in my previous answer.
 20 BY MS. DAVIDSON:
 21 Q. It was lost in the long answer. So I
 22 just want to make sure I have the record clear.
 23 A. Okay. Once again, we did not find a
 24 dose-response for frequency or duration as I noted
 25 in my report based on broad categorizations.

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1 MS. DAVIDSON: Okay. Let's go off the
 2 record.
 3 * * *
 4 (Whereupon, there was a luncheon
 5 recess in the proceedings from 12:10 p.m.
 6 to 12:59 p.m.)
 7 * * *
 8 BY MS. DAVIDSON:
 9 Q. So we're going to go to your 2023
 10 report, which is Exhibit 6, and we had started
 11 talking about that. And I believe we talked about
 12 Davis.
 13 A. Uh-huh.
 14 Q. And just to reorient us, I had a few
 15 questions about a paper called Phung 2022.
 16 A. Uh-huh.
 17 Q. We can mark that, M.T. Phung, et
 18 al. --
 19 MS. PARFITT: I believe it's
 20 Exhibit 8.
 21 MS. DAVIDSON: Yeah. I'm about to say
 22 that, 8. "Effects of risk factors for
 23 ovarian cancer in women with and without
 24 endometriosis." I'm going to mark it as
 25 Exhibit 8. Our court reporter can't type

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1 and stamp at the same time. So that's why
 2 I did the title first.
 3 (MOORMAN EXHIBIT 8, Effects of risk
 4 factors for ovarian cancer in women with
 5 and without endometriosis, was marked for
 6 identification.)
 7 BY MS. DAVIDSON:
 8 Q. Dr. Moorman, you're familiar with this
 9 paper, correct?
 10 A. Yes, I am.
 11 Q. Are you familiar with any of the
 12 authors on here?
 13 A. I have met many of them over the
 14 years.
 15 Q. Who is Daniel Cramer?
 16 A. Daniel Cramer, he's an ovarian cancer
 17 epidemiologist. He's also a medical doctor. He
 18 was the one who published probably the first
 19 epidemiologic study noting an association --
 20 increased risk of ovarian cancer with talc use.
 21 And I understand that he is also a plaintiff
 22 witness.
 23 Q. Does this paper indicate somewhere
 24 that Dr. Cramer is a plaintiff expert?
 25 A. Yes. In the acknowledgments.

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1 Q. What does it say?
 2 A. Wait. I'm sorry. He reports payment
 3 for expert testimony from Ferraro Law Firm and
 4 Ashbrook [sic] -- Ashcraft & Gerel law firm in
 5 grant funding.
 6 Q. And does this paper indicate that that
 7 payment involves talc litigation?
 8 A. No, it does not.
 9 Q. And does it indicate whether he is an
 10 expert for the plaintiff side or the defense side?
 11 A. No, it does not state that in that
 12 disclosure.
 13 Q. So the average person reading this
 14 paper wouldn't know that Dr. Cramer is a
 15 plaintiff's expert, correct?
 16 A. No, they would not know that from that
 17 statement.
 18 Q. And what's an open access article?
 19 A. An open access --
 20 Q. Uh-huh.
 21 A. -- article? Just as the name implies,
 22 that it is available to -- to anyone, that it does
 23 not require a subscription to the journal.
 24 Q. Is there a difference between open
 25 access journals and other journals?

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1 A. Well, getting into a bit of it, for
 2 some journals that are not open access, if you
 3 want to access one of their articles, you either
 4 have to be a subscriber or you have to pay a fee
 5 for the article.
 6 There is an NIH requirement that if --
 7 work that is funded by NIH funding has to be
 8 available in this -- as they describe here, the
 9 HHS public access, meaning that it's freely
 10 available.
 11 Q. Do open access journals have the same
 12 publication standards as other journals?
 13 A. I mean, you're talking about a whole
 14 range of journals, and there's a range of
 15 standards with -- within every journal. But
 16 generally, open access journals, speaking in very
 17 general terms, they would go through a peer review
 18 process, just like a non-open access journal.
 19 Q. Got it. I just didn't know.
 20 Have you ever spoken with Dr. Cramer?
 21 A. Yeah, I have. Not in quite a few
 22 years, but I have spoken to him in the past.
 23 Q. About this litigation?
 24 A. Never about this litigation.
 25 Q. Have you ever spoken to any of

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1 plaintiff's experts about this litigation?
 2 A. No. Not to my knowledge, no.
 3 Q. Have you ever spoken to any of your
 4 professional colleagues about this litigation?
 5 A. I have spoken to several of my
 6 colleagues that I am involved in it. I have not
 7 discussed really any of the specifics of it, you
 8 know, like not going through articles and
 9 expressing my opinion or asking their opinion
 10 about any articles. It's always been in very
 11 general terms of this is something that I am
 12 doing.
 13 Q. And is the involvement of a
 14 plaintiff's expert one factor that you consider in
 15 weighing the reliability of an article?
 16 A. Again, as we discussed, when looking
 17 at whether or not there is any potential conflicts
 18 of interest, it's like, sure, it's something that
 19 you might consider. But what really drives it is
 20 that -- the same thing that drives any evaluation
 21 of an article, mainly just looking at the
 22 methodology and -- and the interpretations.
 23 Q. Is family history a risk factor for
 24 ovarian cancer?
 25 A. You need to be more specific.

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1 Q. Is a family history of ovarian cancer
 2 considered to be a risk factor for ovarian cancer?
 3 A. Yes. You asked only about family
 4 history, but a family history of ovarian cancer is
 5 a risk factor -- is considered a risk factor.
 6 Q. If you look at Table 2 of the Phung
 7 paper, what's the reported odds ratio for
 8 first-degree family history of ovarian cancer with
 9 endometriosis?
 10 A. So -- okay. The printing on this
 11 version of it is a little wonky. That's why
 12 it's taking a minute.
 13 So among women with endometriosis,
 14 those that have a first-degree family history of
 15 ovarian cancer, the odds ratio is 1.58.
 16 Q. And what about for first-degree
 17 history of ovarian cancer without endometriosis?
 18 A. For them, the odds ratio is 2.20.
 19 Q. So just to make sure I understand,
 20 does this paper report a higher odds ratio for
 21 family history without endometriosis?
 22 A. Yes. The -- the point estimate is
 23 among women without a -- who did not report a
 24 history of endometriosis, the odds ratio for a
 25 family -- first-degree family history of ovarian

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1 cancer was 2.20. And for women with
 2 endometriosis, they reported 1.58. And you can
 3 see there's considerable overlap in the confidence
 4 intervals --
 5 Q. Why is the overlap in the confidence
 6 intervals relevant?
 7 A. It's -- so their best estimate of that
 8 association is what's reported in the point
 9 estimate, the odds ratio. And then the confidence
 10 intervals gives a range of values with which the
 11 data are statistically compatible.
 12 And so one way to think about it is,
 13 like, if you repeated the experiment many times,
 14 you might come up with a slightly higher estimate
 15 or a slightly lower estimate. But you can see
 16 that the confidence intervals overlap. So there's
 17 a lot of overlap in the range of values for which
 18 the data are statistically compatible.
 19 Q. Got it.
 20 And that's the same thing we found in
 21 O'Brien for the hazard ratio for patent and
 22 nonpatent women, right?
 23 A. That there was -- yes, I did
 24 acknowledge that there was considerable overlap in
 25 those odds ratios.

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1 Q. Is there any reason why having
 2 endometriosis would cause the known risk factor of
 3 first-degree family history for ovarian cancer to
 4 become attenuated?

5 MS. PARFITT: Objection.

6 THE WITNESS: One could -- I think --
 7 let me start again.

8 I cannot think of a reason of that --
 9 why that would be the case, but I think
 10 that this is just possibly reflecting
 11 some -- a little bit of random variation.
 12 It's -- you know, in this particular study,
 13 they found an odds ratio of 1.58 among
 14 women who had a history of endometriosis.
 15 In other studies, it might be a bit lower
 16 or a bit higher.

17 BY MS. DAVIDSON:

18 Q. So you're saying, rather than
 19 endometriosis protecting you from ovarian cancer
 20 when you have a family risk, this may just be a
 21 numbers issue?

22 A. It may be a numbers issue. It may be
 23 some biological mechanism of which I am unaware.

24 Q. Could you turn to Table 1? Are you
 25 looking at Supplementary Table 1?

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1 A. I didn't realize you said
 2 "supplementary."

3 Q. I probably screwed up. I apologize.

4 A. Okay. This -- the version that you
 5 provided to me does not -- does not have
 6 Supplemental Table --

7 MS. DAVIDSON: Asher, can we mark
 8 Supplemental Table 1 of Phung as -- as our
 9 next exhibit. I didn't realize it wasn't
 10 stapled to the back.

11 THE WITNESS: Okay.

12 MS. DAVIDSON: So we're marking
 13 Supplemental Tables 2 Phung as Exhibit
 14 Number --

15 MS. PARFITT: 9.

16 MS. DAVIDSON: -- as Exhibit Number 9.
 17 (MOORMAN EXHIBIT 9, Supplemental Table
 18 1 and 2 Phung, was marked for
 19 identification.)

20 BY MS. DAVIDSON:

21 Q. Did you look at these supplementary
 22 tables when you reviewed Phung?

23 A. I did.

24 Q. You did?

25 A. Yes, I did.

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1 Q. Is it your typical practice to look at
 2 supplemental tables when you review a study?

3 A. I often do, yes.

4 Q. Okay. I'm looking at these
 5 supplemental tables. And if you go down to
 6 "Talc use," Page 2, it shows talc use, genital
 7 use, never, nongenital use, and then it says
 8 missing, right?

9 A. Correct.

10 Q. And as I read it, there's a lot of
 11 data missing on talc use, right?

12 A. Correct.

13 Q. In every column, it's somewhere around
 14 40 percent, right?

15 A. That is correct.

16 Q. So both for cases/controls with
 17 endometriosis, without endometriosis, there's a
 18 lot of missing information there, right?

19 MS. PARFITT: Objection. Form.

20 THE WITNESS: They report -- yes, they
 21 report missing values of roughly 40
 22 percent.

23 BY MS. DAVIDSON:

24 Q. And if you look at the supplemental
 25 table -- they call it "Supplementary Table" -- for

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1 each characteristic, they tell you how much data
 2 are missing, right?

3 A. Uh-huh.

4 Q. And there's a percentage for each
 5 characteristic. And talc is, by far, the one with
 6 the highest amount of missing data; is that
 7 correct?

8 MS. PARFITT: Objection. Form.

9 THE WITNESS: Yes.

10 BY MS. DAVIDSON:

11 Q. Do you know why so much data are
 12 missing?

13 A. I would presume that there may have
 14 been some of the included studies that did not
 15 include that question on their questionnaire.

16 Q. Did -- did the volume of missing data
 17 affect in any way your analysis of this paper?

18 A. It -- it really did not because it
 19 would -- within that subset of women who had
 20 missing data, it would not have differed; like,
 21 you know, the cases were reporting it, and the
 22 controls were not. I don't think that there was
 23 any difference. I think that is -- there just
 24 might have been some studies that did not ask
 25 about --

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1 Q. So -- so when you discussed Phung in
 2 your paper -- in your report -- in your 2023
 3 supplemental report, you don't mention that
 4 there's -- approximately 40 percent of the data
 5 were missing, right?
 6 A. No. I think that's a
 7 mischaracterization. It's not missing -- not a
 8 huge amount of missing data from a single study,
 9 which might raise some different concerns.
 10 It's -- apparently, there were just some studies
 11 that did not have that data available or -- or
 12 perhaps in a form that was compatible with how the
 13 others collected it.
 14 Q. My question was just simply: You
 15 don't address Supplemental Table 1 and the missing
 16 data in your report, correct?
 17 A. No, I do not.
 18 MS. PARFITT: Objection.
 19 BY MS. DAVIDSON:
 20 Q. Thank you.
 21 Can we go back to O'Brien 2020, which
 22 I believe is Exhibit 2. You commented in your
 23 paper -- in your report that women who had ovarian
 24 cancer prior to baseline were excluded, right? Do
 25 you recall discussing that in your report?

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1 A. I did.
 2 Q. And you state in your report: If talc
 3 use is more strongly associated with ovarian
 4 cancer diagnosed at younger ages, the use of
 5 cohorts of older women would be less able to
 6 detect such an association.
 7 Do you recall saying that?
 8 A. I do.
 9 Q. Can you point to any studies that show
 10 that talc is more strongly associated with ovarian
 11 cancer diagnosed at younger ages?
 12 A. I believe that -- just one moment. I
 13 recall that one of the papers that Dan Cramer was
 14 a co-author on -- and I'm not sure exactly which
 15 one it was, but -- did report a stronger
 16 association for premenopausal women.
 17 Q. Are you offering an opinion in this
 18 litigation that talc use is more strongly
 19 associated with ovarian cancer diagnosed at
 20 younger ages?
 21 A. I am not offering any opinion in that
 22 regard.
 23 Q. Okay. Then we don't have to talk
 24 about it anymore.
 25 A. Okay.

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1 Q. So is it fair to say that was just --
 2 that sentence was just -- was that sentence
 3 speculative?
 4 MS. PARFITT: Objection. Form.
 5 THE WITNESS: What I was pointing out
 6 with that statement is that -- potential
 7 limitations of studies. And a potential
 8 limitation of this study, the Women's
 9 Health Initiative, the -- the women were 63
 10 years old on average when they were
 11 enrolled in the cohort. And so it is a
 12 potential concern. That's what I was
 13 pointing out.
 14 BY MS. DAVIDSON:
 15 Q. And is that a potential concern for
 16 the NHS studies or the sister study?
 17 A. It's actually a concern for -- for --
 18 for all of them. I mean, that's across the board.
 19 It's like, you know, from the point that -- you
 20 know, as we often do, we have some concerns about
 21 potential limitations of the study and all of
 22 these -- and to some -- I mean, the Women's Health
 23 Initiative is the most extreme where the -- the
 24 age of the cohort was the oldest. But it's a
 25 concern with -- with all of them to some extent.

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1 Q. What are the strengths of the O'Brien
 2 paper?
 3 A. So some of the strengths of it are
 4 that it does have a pretty large sample size.
 5 It's generally the -- the studies were
 6 well-conducted studies by, you know, strong
 7 investigators, although none of them were actually
 8 designed specifically to address ovarian cancer.
 9 And so as in cohort studies in
 10 general, they're able to address a lot of
 11 different risk factors. But in general, they tend
 12 to get -- have less detail on some of the
 13 exposures.
 14 So like any cohort studies, there are
 15 some strengths in terms of the sample size, the
 16 fact that the data were collected before the
 17 diagnosis of -- of ovarian cancer. But then those
 18 are balanced with some of the limitations of any
 19 cohort study as well.
 20 Q. Do you list in your report any -- do
 21 you have a section in your report where you list
 22 the strengths of the O'Brien paper?
 23 A. I did not specifically.
 24 MS. DAVIDSON: Okay. Let's talk about
 25 Woolen 2022. Let's mark that paper as

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1 Exhibit 10. Exhibit 10. And the title of
 2 the paper is S.A. Woolen, et al.,
 3 "Association Between the Frequent Use of
 4 Perineal Talcum Powder Products and Ovarian
 5 Cancer: a Systematic Review and
 6 Meta-analysis. 2022.
 7 (MOORMAN EXHIBIT 10, Association
 8 Between the Frequent Use of Perineal Talcum
 9 Powder Products and Ovarian Cancer: a
 10 Systematic Review and Meta-analysis, was
 11 marked for identification.)
 12 BY MS. DAVIDSON:
 13 Q. Are you familiar with any of the
 14 authors of the Woolen paper?
 15 A. I don't believe that I've ever met any
 16 of them in person.
 17 Q. Who is the senior author?
 18 A. The last author is Rebecca
 19 Smith-Bindman.
 20 Q. And have you heard her name before you
 21 read this paper?
 22 A. I believe that I have read some of her
 23 other work, and I understand that she is an expert
 24 in this litigation.
 25 Q. Have you read her expert -- any of her

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1 expert reports in this litigation?
 2 A. Not that I recall.
 3 Q. Are you aware that this meta-analysis
 4 stemmed from her expert report?
 5 MS. PARFITT: Objection.
 6 THE WITNESS: I do not. I mean, all I
 7 know about this report is what's in the
 8 paper. There's no mention of that, to my
 9 knowledge, in the paper. I don't recall
 10 that being mentioned.
 11 BY MS. DAVIDSON:
 12 Q. So you didn't know she did a
 13 meta-analysis for the litigation?
 14 A. I don't recall reading a report -- her
 15 report, so I don't know what she did or did not
 16 do.
 17 Q. So I take it you didn't compare the
 18 Woolen paper to the meta-analysis she did in the
 19 litigation?
 20 A. No, I don't. I -- I don't recall
 21 reading a report from her.
 22 Q. Do you know that Dr. Woolen received
 23 Dr. Smith-Bindman's litigation report before
 24 beginning this paper?
 25 MS. PARFITT: Objection. Form.

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1 THE WITNESS: Again, what I know about
 2 it is what's in this article, and I don't
 3 believe there was any mention of that.
 4 BY MS. DAVIDSON:
 5 Q. Would the fact that Dr. Woolen
 6 received Dr. Smith-Bindman's litigation report
 7 before setting out to do this study affect your
 8 grading or weighting of the study's quality?
 9 A. Again, it's -- knowing that one of the
 10 authors was a plaintiff's expert, certainly what
 11 it does is it just makes me evaluate the
 12 methodology, and was there anything that I found
 13 particularly concerning about the methodology or
 14 the interpretation. That's how I would take that
 15 knowledge into consideration.
 16 Q. At the top of this paper, the
 17 background says: Risk of ovarian cancer in women
 18 with frequent perineal talcum powder product use
 19 is not well understood.
 20 Do you agree with that?
 21 MS. PARFITT: You're referencing the
 22 background?
 23 MS. DAVIDSON: The very first
 24 sentence.
 25 MS. PARFITT: She's looking at that.

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1 Thank you.
 2 THE WITNESS: I think that the
 3 modifier the -- frequent perineal talcum
 4 powder use, the "frequent" is the modifier.
 5 And I think that that's what they were
 6 trying to get at, that there has not been a
 7 systematic review that focused on frequent
 8 use.
 9 So from the standpoint that it's not
 10 well understood, there have not been a lot
 11 of data. At least they have not been
 12 combined into a systematic review like
 13 that.
 14 So I -- I can see where they're coming
 15 from, and I think that it's a fair
 16 statement for what they're getting at.
 17 BY MS. DAVIDSON:
 18 Q. How did the authors decide to define
 19 "frequent use" as 2 times -- at least 2 times per
 20 week?
 21 A. They do not describe their reasoning
 22 for it. They define what they, you know -- like
 23 any paper, you make decisions about what you're
 24 going to analyze, and you just need to be -- just
 25 lay it out. This is what she did. And they

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1 didn't explain why they set that cut point.
 2 Q. Are you aware of any papers prior to
 3 Woolen that defined frequent powder use
 4 differently than at least 2 times per week?
 5 MS. PARFITT: Objection. Form.
 6 THE WITNESS: Generally, papers would
 7 have some -- if they had some measure of
 8 frequency, they would just lay out the
 9 categories what they had, you know, if it
 10 was once a week or how many times per
 11 month, you know, one time a month, you
 12 know, five to ten times a month or
 13 whatever. I don't think that it's typical
 14 to say -- to say this is frequent; this is
 15 infrequent.
 16 BY MS. DAVIDSON:
 17 Q. Well, this paper says that more than 2
 18 times a week is frequent, right?
 19 A. That's how they defined it. And like
 20 I said, when you do an analysis, they are just
 21 saying how they defined this exposure. Frequent
 22 use defined as.
 23 And, you know, another person might
 24 disagree with, no, that's infrequent or that's not
 25 frequent enough. But as long as the authors are

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1 clear on what -- what they're defining it as, it's
 2 easy to interpret the data, and it's fair to
 3 interpret the data like that.
 4 Q. I think you didn't understand my
 5 question, which was: Are you familiar with any
 6 other talc literature in this body of literature
 7 that we're discussing here today that defined
 8 "frequent use" differently?
 9 MS. PARFITT: Objection. Excuse me.
 10 Objection. Form.
 11 THE WITNESS: I believe that I've
 12 answered your question. They don't
 13 typically say this is frequent; this is
 14 infrequent. They just put the categories
 15 of use when they're talking about
 16 frequency.
 17 BY MS. DAVIDSON:
 18 Q. These authors say frequent, right?
 19 Frequent is at least 2 times per week, right?
 20 A. And that is the decision that they
 21 made. They wanted to look at women who were using
 22 it more frequently, what -- and they delineated
 23 the cut point that they used and -- so, again,
 24 it's -- a different set of investigators might
 25 have defined it differently. But they're being

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1 transparent, I think, about what they -- what they
 2 defined.
 3 Q. Right. But my question simply is
 4 just: Are you aware of any papers that have a
 5 different cut point for frequency?
 6 MS. PARFITT: Objection. Asked and
 7 answered.
 8 MS. DAVIDSON: No, it hasn't been
 9 answered.
 10 MS. PARFITT: I believe it has.
 11 THE WITNESS: I don't -- I -- what I
 12 have answered repeatedly is that,
 13 typically, when they talk about frequency,
 14 they give the categories that they used. I
 15 don't -- I don't think that it is very
 16 common to say frequent or infrequent. They
 17 just report the categories they used.
 18 BY MS. DAVIDSON:
 19 Q. But this paper reports frequent or
 20 infrequent, right?
 21 A. They -- they are -- they describe what
 22 they hoped to do, to look at use among more
 23 frequent users. Then they had to set a cut
 24 point --
 25 Q. Right.

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1 A. -- because there would be -- and so
 2 they -- they put it out there that what they
 3 wanted to look at are those women who had used it
 4 2 or more times per week.
 5 Q. Right. Totally agree. And I'm
 6 asking: Are there any other papers in this whole
 7 body of literature that also defined "frequent"
 8 with a cut point but use a different cut point?
 9 That's all I'm asking.
 10 A. I don't recall --
 11 Q. Okay.
 12 A. -- anyone -- I -- I just don't recall
 13 any people -- I don't recall people defining
 14 frequent, infrequent, like -- they just report the
 15 categories of frequency of use. That's what I
 16 recall from the papers.
 17 Q. So this is the only paper that you can
 18 think of that has a cut point for the use of the
 19 word "frequent"?
 20 MS. PARFITT: Objection. Misstates
 21 her testimony.
 22 THE WITNESS: What they were doing
 23 there is they wanted to set, basically, a
 24 minimum level --
 25 BY MS. DAVIDSON:

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1 Q. Right.

2 A. -- of frequency of use.

3 Q. Right.

4 A. And they just put it out there. And I

5 think -- I think it's fine. It's -- it's --

6 Q. No, I know you think it's fine. I'm

7 just asking whether you know whether any other

8 papers define "frequent" with a different cut

9 point. That's all I'm asking.

10 MS. PARFITT: Again, objection. It's

11 been asked, and it's been answered

12 exhaustively. I'm not sure she can answer

13 better.

14 THE WITNESS: I -- I truly do not -- I

15 think I've answered the question about

16 three times already.

17 BY MS. DAVIDSON:

18 Q. And the answer is, no, you don't know

19 of another paper that uses the term "frequent"

20 with a different cut point?

21 MS. PARFITT: Objection. That's not

22 her testimony. Misstates.

23 BY MS. DAVIDSON:

24 Q. So it's a "yes" or "no."

25 A. What I --

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1 MS. PARFITT: It's neither.

2 THE WITNESS: What I have stated is,

3 what I typically recall from the papers is

4 they report the categories of frequency.

5 And I don't recall papers saying this is

6 frequent; this is infrequent. This is

7 basically their inclusion criteria for the

8 studies that they wanted to include for the

9 purpose of looking at women who had used

10 talc more frequently.

11 BY MS. DAVIDSON:

12 Q. Is the reliability of a meta-analysis

13 contingent on proper selection of studies and

14 datasets?

15 A. Yes.

16 Q. And fair to say that the authors of a

17 meta-analysis can skew the results based on

18 selection of studies -- right?

19 MS. PARFITT: Objection.

20 BY MS. DAVIDSON:

21 Q. -- based on how they select studies?

22 A. It is important for authors to be

23 transparent about the inclusion criteria that they

24 set out. They go through and they describe what

25 they did, and it's a pretty typical description of

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1 what you do with a meta-analysis.

2 And with selection of studies, a

3 different investigator might make a different

4 decision. But it's -- these -- the results

5 they're presenting here are the results from

6 studies that reported frequent use defined as that

7 minimum level.

8 And, you know, so the results should

9 be appropriate for studies that met that inclusion

10 criteria. And I wouldn't consider that skewing

11 the results.

12 Q. My question simply was: Is there a

13 risk that authors of a meta-analysis can skew the

14 results based on how they define inclusion

15 criteria --

16 MS. PARFITT: Objection. Form.

17 BY MS. DAVIDSON:

18 Q. -- generally?

19 MS. PARFITT: Objection. Form.

20 THE WITNESS: If someone did not do a

21 meta-analysis according to typical

22 standards, and they did some very

23 outrageous exclusion or inclusion of

24 studies, they could skew the results.

25 But when it's laid out how they did

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1 it, and you might disagree with some of the

2 decisions, but I don't think the results

3 would be skewed if they clearly lay out

4 their inclusion criteria and how they

5 selected their studies.

6 BY MS. DAVIDSON:

7 Q. So is it your testimony that as long

8 as the authors state their inclusion criteria,

9 there's no concern that they are skewing results

10 based on the decisions they're making?

11 A. What I am saying is, I don't really

12 like the phrasing "skewing the results." Like,

13 they're making a decision to define "frequency" as

14 at least 2 times -- 2 or more times per week.

15 Someone else might disagree with that and say, no,

16 frequent use has to be at least 5 times a week.

17 And that's not skewing the results. It's just,

18 like -- it's making a decision.

19 And then it's -- if they're following

20 the normal, standard procedures for doing a

21 meta-analysis, then the results are what they are

22 for that set of articles. And as long as they're

23 transparent, I would not consider the results to

24 be skewed. It's the results for that set of

25 studies.

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1 Q. What's the Newcastle-Ottawa Scale?

2 A. It is one of several scales that --

3 that are sometimes used in meta-analyses to rate

4 the quality of studies. There are a number of

5 criteria that can be applied. And basically, it

6 gives you -- can give you an idea of some of the

7 studies that are perhaps stronger and some that

8 are weaker by the criteria they lay out.

9 Q. Is that -- is it objective or

10 subjective?

11 A. It is -- it's truly both. You come up

12 with a number, but it is -- which sounds

13 subjective. But along the way it's sometimes

14 difficult to say, you know, did they do a good job

15 on selection, or did they adequately control for

16 confounding?

17 And so, you know, someone might say,

18 well, they controlled for confounding, but they

19 didn't control for all the possible confounders.

20 So there is some subjectivity in the -- applying

21 the criteria. And so you use a somewhat

22 subjective criteria, and you wind up with a number

23 that is somewhat objective.

24 Q. If you look at Table 1, which study

25 receives the highest score?

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1 A. It was the data from the Nurses'

2 Health Study.

3 Q. Do you agree with that assessment?

4 A. I -- I'm -- you know, I have never --

5 I think that the Nurses' Health Study is a

6 well-designed study overall. I think that it's

7 generally a strong study, but it does have

8 limitations. And then the difference between that

9 9 and then the 8s for most of the case-control

10 studies, all of that means they're pretty --

11 they're good studies.

12 Q. Do you recall any other paper that you

13 reviewed in this litigation that also used

14 Newcastle-Ottawa Scale?

15 A. I'm not -- I mean, the

16 Newcastle-Ottawa Scale is one of several scales

17 that are -- have been used in meta-analysis to

18 assess study quality.

19 And, you know, I have reviewed several

20 meta-analyses in the course of reviewing all of

21 this. And I do not recall which used

22 Newcastle-Ottawa's Scale, which used maybe the

23 Cochrane Scale, and I think there are several

24 others. So I just --

25 Q. So you don't recall that Taher 2019

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1 also used the Newcastle-Ottawa Scale?

2 A. I didn't recall that specifically, no.

3 Q. And did you compare the scores that

4 Woolen gave to these studies versus the scores

5 that Taher gave these studies?

6 A. I did not.

7 Q. If you look at the Whittenmore paper

8 here, you can see that Woolen and Smith-Bindman

9 give the Whittenmore study a score of 8 -- a 7,

10 correct?

11 A. Yes, I do see that.

12 Q. Does that 7 connote a strong study?

13 A. I mean, it's -- I think that it

14 connotes a study that is overall pretty good, but

15 some limitations as well. There's no perfect

16 study.

17 Q. Do you know why Woolen would have

18 assigned higher ratings to most of the

19 case-control studies than Taher did?

20 A. I wouldn't know that. As I said,

21 there is some subjectivity in applying each of the

22 criteria scores, and so it would not be completely

23 out of question that different evaluators might be

24 more rigid or more lenient.

25 Q. Do you have a view as to whether these

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1 scores provided by Woolen under the

2 Newcastle-Ottawa Scale are more or less reliable

3 than the very different scores that are in the

4 Taher paper?

5 MS. PARFITT: Objection. Form.

6 THE WITNESS: I -- I don't know what

7 the thought process was for either set of

8 investigators. You know, I -- I do know

9 from using similar scales that there is

10 some subjectivity in it, and it's not

11 necessarily reflecting any bias on the part

12 of the investigator. But it's -- sometimes

13 it's just hard to get the information

14 because it might not be well reported in

15 some paper. I don't know what their

16 thought processes were.

17 BY MS. DAVIDSON:

18 Q. If we could turn to Page 2531. At the

19 bottom of Page 2531, the Woolen paper states that

20 the studies were of high quality. Do you see

21 that? Right at the end of Page 2531. Almost at

22 the end of that page. 2531. Right at the bottom.

23 Under "Strengths."

24 A. Yes.

25 Q. The author states: the included

<p style="text-align: right;">Page 150</p> <p>1 studies were of high quality.</p> <p>2 Do you see that?</p> <p>3 A. Yes.</p> <p>4 Q. That's very different from what Taher</p> <p>5 said, correct?</p> <p>6 MS. PARFITT: Objection. Form.</p> <p>7 THE WITNESS: I'm not sure exactly</p> <p>8 what statement you're referring to in the</p> <p>9 Taher report.</p> <p>10 BY MS. DAVIDSON:</p> <p>11 Q. Have you forgotten that we discussed</p> <p>12 right before lunch that Taher said the quality of</p> <p>13 the evidence was very low?</p> <p>14 A. You're talking about two different</p> <p>15 things here. This is -- that is not talking to</p> <p>16 the quality of individual studies.</p> <p>17 Q. You don't think Taher was talking</p> <p>18 about the quality of the individual studies?</p> <p>19 A. I think that he was talking about some</p> <p>20 of the limitations in the -- but I think that it's</p> <p>21 not a direct apples-to-apples comparison. I think</p> <p>22 that it is possible to have high-quality studies</p> <p>23 that still have some limitations.</p> <p>24 Q. But Taher gave lower points on the</p> <p>25 Newcastle-Ottawa Scale to all these studies. Is</p>	<p style="text-align: right;">Page 152</p> <p>1 women?</p> <p>2 A. Right offhand, I don't know -- I don't</p> <p>3 know.</p> <p>4 Q. So you don't know what, if any,</p> <p>5 publications they were trying to harmonize to,</p> <p>6 correct?</p> <p>7 A. No, I do not.</p> <p>8 Q. Did O'Brien provide data for all</p> <p>9 women?</p> <p>10 MS. PARFITT: Objection. Form.</p> <p>11 BY MS. DAVIDSON:</p> <p>12 Q. To Woolen?</p> <p>13 A. They -- they say data -- the data from</p> <p>14 NHSI were provided and described in Supplemental</p> <p>15 Table 1. But it is not entirely clear to me did</p> <p>16 they provide it for all women in the study or only</p> <p>17 those -- I don't know -- they don't specify.</p> <p>18 Q. Did you look at Supplemental Table 1?</p> <p>19 A. I -- I don't have it here. Do you --</p> <p>20 Q. Do you recall if you looked at it in</p> <p>21 evaluating the paper?</p> <p>22 A. I know that I looked at the</p> <p>23 supplemental data just trying --</p> <p>24 MS. PARFITT: I'm going to get it to</p> <p>25 you, yep.</p>
<p style="text-align: right;">Page 151</p> <p>1 that also not an apples-to-apples comparison?</p> <p>2 MS. PARFITT: Objection. Form.</p> <p>3 Misstates the evidence.</p> <p>4 THE WITNESS: You know, again, I do</p> <p>5 not recall the -- the scores right off that</p> <p>6 he gave on this scale. I already stated</p> <p>7 that I didn't do a comparison. And I've</p> <p>8 explained that there is some subjectivity</p> <p>9 in assigning the scores, and I don't know</p> <p>10 what their thought processes were.</p> <p>11 BY MS. DAVIDSON:</p> <p>12 Q. Did the authors of Woolen use all</p> <p>13 women from the NHSI study with frequent use in</p> <p>14 their meta-analysis?</p> <p>15 A. Okay. They indicate that they</p> <p>16 included women with intact fallopian tubes.</p> <p>17 Q. Where are you reading from?</p> <p>18 A. It is in the footnote to Table 2.</p> <p>19 Q. Uh-huh. Footnote 5?</p> <p>20 A. Yes.</p> <p>21 Q. And why do they say they did that?</p> <p>22 A. They said to harmonize with other</p> <p>23 publications.</p> <p>24 Q. Are there any other publications</p> <p>25 listed in Table 2 that are limited to patent</p>	<p style="text-align: right;">Page 153</p> <p>1 MS. DAVIDSON: We're going to mark it</p> <p>2 as an exhibit.</p> <p>3 THE WITNESS: Okay.</p> <p>4 MS. PARFITT: Mine is marked up. I</p> <p>5 don't think you're going to approve of</p> <p>6 that. Mine has marks on it, so let's get a</p> <p>7 clean one.</p> <p>8 MS. DAVIDSON: Exhibit 11. I'm sorry?</p> <p>9 MS. PARFITT: I said, mine has marks</p> <p>10 on it, so let's get a clean one.</p> <p>11 MS. DAVIDSON: Yeah, let's not use</p> <p>12 that.</p> <p>13 MS. PARFITT: I'm sure you won't like</p> <p>14 mine.</p> <p>15 MS. DAVIDSON: We're going to mark as</p> <p>16 Exhibit 11 Supplementary Table 1.</p> <p>17 (MOORMAN EXHIBIT 11, Supplementary</p> <p>18 Table 1, was marked for identification.)</p> <p>19 THE WITNESS: Okay. In</p> <p>20 Supplemental -- Supplementary Table 1 --</p> <p>21 let's see. Yeah, they -- they report that</p> <p>22 they got data from all women. And then</p> <p>23 they separate out the data for the women</p> <p>24 with patent, have fallopian tubes.</p> <p>25 BY MS. DAVIDSON:</p>

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1 Q. Would there have been more ovarian
 2 cancer cases if Woolen had done its analysis with
 3 all women?
 4 A. Yes, there would have been.
 5 Q. Have you done any analysis as to how
 6 that might change the -- might have changed the
 7 reported OR for this paper?
 8 A. I have not done any analysis in that
 9 regard, no.
 10 Q. Do you know if it would have been
 11 lower?
 12 MS. PARFITT: Objection. Form.
 13 THE WITNESS: The adjusted hazard
 14 ratio for all women was 1.27. Again,
 15 statistically significantly increase, but
 16 it was lower than what they observed for
 17 the women -- or what they reported for the
 18 women with the patent fallopian tubes,
 19 which was 1.40.
 20 BY MS. DAVIDSON:
 21 Q. That was for daily users?
 22 A. Right.
 23 Q. And what are the criteria for this
 24 paper?
 25 A. Okay. The criteria for including a

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1 study was that it had to be 2 or more times per
 2 week. And then in Table 2 of the main paper, they
 3 specify the talc exposure that they apparently
 4 considered frequent use, and it was daily in the
 5 O'Brien study.
 6 Q. While we're looking at Table 2, under
 7 specification of talc exposure, are any of those
 8 frequencies listed there less than 4 times a week?
 9 A. No. The -- Mills reports their
 10 highest category of exposure was 4 to 7 times per
 11 week. And I believe that's what they did, that
 12 they -- I believe that they were looking at the
 13 women in the highest category of use.
 14 Q. Do you know why it says on Page 1 that
 15 they looked at 2 times per week or more use, when
 16 Table 2 shows that, actually, they only used data
 17 for 4 times or more per week use?
 18 MS. PARFITT: Objection. Form.
 19 THE WITNESS: Once again, it was --
 20 they established that criteria that a study
 21 had to -- apparently, that's the criteria
 22 they established; that to be included in
 23 their analysis, they had to have this
 24 exposure of at least 2 times a week.
 25 And then I believe they went on to --

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1 to say but what they actually analyzed were
 2 the most frequent -- the highest level of
 3 exposure reported in the study. And it
 4 just would be, in this case, among those
 5 studies that met their criteria of
 6 reporting on use at least 2 times a week,
 7 all of the studies had 4 times a week or
 8 more that --
 9 BY MS. DAVIDSON:
 10 Q. Would it have been more accurate to
 11 state in the background that they actually did a
 12 meta-analysis of data for 4 times or more per week
 13 use?
 14 MS. PARFITT: Objection.
 15 THE WITNESS: So, once again, it's
 16 like they set out these criteria. "A study
 17 would be included if," and so if they
 18 reported use on at least 2 times a week.
 19 So that was -- this is the cut point they
 20 used for including the study or not.
 21 Then they went through looking at all
 22 the studies. And it's like these 11
 23 studies met that criteria of having at
 24 least 2 times a week, but they actually had
 25 greater than 2 times a week.

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1 So it's kind of like the distinction
 2 between what is the minimum level to be
 3 included as one of the studies versus what
 4 was actually done in that study.
 5 BY MS. DAVIDSON:
 6 Q. Do you know how many of the papers
 7 listed here as 1 through 11 provide hazard ratios
 8 for 2 or more times per week of use?
 9 A. No, I have not gone through them
 10 individually to look at that.
 11 Q. Do you know whether the risk ratios
 12 reported in these papers for 2 times per week or
 13 more of use differ from those set forth in Table
 14 2?
 15 MS. PARFITT: Objection.
 16 THE WITNESS: Please repeat that
 17 question. I didn't catch it.
 18 MS. DAVIDSON: Can you repeat it?
 19 (The following question was read back:
 20 Q: Do you know whether the risk
 21 ratios reported in these papers for 2 times
 22 per week or more of use differ from those
 23 set forth in Table 2?)
 24 THE WITNESS: As I said, I don't
 25 recall specifically from these studies

<p style="text-align: right;">Page 158</p> <p>1 which, if any, reported an odds ratio for</p> <p>2 specifically 2 times a week or more. I</p> <p>3 don't know what the categories were --</p> <p>4 which were -- off the top of my head, I</p> <p>5 don't know the categories of frequency of</p> <p>6 use that each of these studies reported on.</p> <p>7 BY MS. DAVIDSON:</p> <p>8 Q. So you don't know how using data for 2</p> <p>9 times more per week of use would have changed the</p> <p>10 results of this paper?</p> <p>11 MS. PARFITT: Objection. Misstates</p> <p>12 her testimony.</p> <p>13 THE WITNESS: I just want to make sure</p> <p>14 that my recollection is correct, that</p> <p>15 they --</p> <p>16 Okay. As they describe in the title</p> <p>17 to Table 2, they -- it's the most frequent</p> <p>18 perineal talcum powder use reported for</p> <p>19 each study was abstracted.</p> <p>20 BY MS. DAVIDSON:</p> <p>21 Q. Correct. And my question was --</p> <p>22 MS. PARFITT: Wait. I think she was</p> <p>23 in the midst of answering the question.</p> <p>24 THE WITNESS: And --</p> <p>25 MS. PARFITT: Give her a moment.</p>	<p style="text-align: right;">Page 160</p> <p>1 that analysis. So I can't say that I know</p> <p>2 what it would be.</p> <p>3 BY MS. DAVIDSON:</p> <p>4 Q. You didn't go back to the papers and</p> <p>5 do your own analysis?</p> <p>6 A. No, I did not.</p> <p>7 THE WITNESS: Would you mind if -- I</p> <p>8 mean, I don't know if you're mostly</p> <p>9 finished with this paper or not, but we've</p> <p>10 been going for quite a while. Would you</p> <p>11 mind taking a break?</p> <p>12 MS. DAVIDSON: Do you want to take a</p> <p>13 break? What time is it?</p> <p>14 MS. PARFITT: It's 2:00.</p> <p>15 MR. TRANGLE: It's 2:00.</p> <p>16 MS. DAVIDSON: The thing is, at 2:30 I</p> <p>17 need to take a break. So you want --</p> <p>18 THE WITNESS: I understand.</p> <p>19 MS. DAVIDSON: -- to take one now and</p> <p>20 then again?</p> <p>21 MS. PARFITT: Take a short one. Yeah,</p> <p>22 let's take a short one.</p> <p>23 THE WITNESS: Just to get up and</p> <p>24 stretch.</p> <p>25 MS. PARFITT: We'll come back in five</p>
<p style="text-align: right;">Page 159</p> <p>1 THE WITNESS: -- again, this is the</p> <p>2 decision they made about how they wanted to</p> <p>3 analyze the data, because my understanding</p> <p>4 is they thought that it would be useful</p> <p>5 what to look at, what is the risk among</p> <p>6 women who use it most frequently.</p> <p>7 And it was, you know, the purpose of</p> <p>8 their paper to look at the -- the</p> <p>9 highest-frequency users. And so I don't</p> <p>10 know if they would have had the data to</p> <p>11 look specifically at greater than 2 times</p> <p>12 per week. I expect that the</p> <p>13 categorizations in many of the studies</p> <p>14 were -- would not have lent itself to that.</p> <p>15 BY MS. DAVIDSON:</p> <p>16 Q. My question simply is: Do you know</p> <p>17 whether the reported hazard ratio would have</p> <p>18 changed in this meta-analysis if they had used the</p> <p>19 data from these papers that involved 2 times per</p> <p>20 more of use as opposed to using the most frequent</p> <p>21 perineal talcum powder use reported for each</p> <p>22 study?</p> <p>23 MS. PARFITT: Objection. Asked and</p> <p>24 answered.</p> <p>25 THE WITNESS: They did not present</p>	<p style="text-align: right;">Page 161</p> <p>1 minutes.</p> <p>2 MS. DAVIDSON: Absolutely.</p> <p>3 * * *</p> <p>4 (Whereupon, there was a recess in the</p> <p>5 proceedings from 2:01 p.m. to 2:07 p.m.)</p> <p>6 * * *</p> <p>7 BY MS. DAVIDSON:</p> <p>8 Q. Dr. Moorman, at the front of the</p> <p>9 Woolen paper on the author's list of</p> <p>10 inclusion/exclusion criteria, do they say that</p> <p>11 they are going to include only studies involving</p> <p>12 women with patent tubes?</p> <p>13 A. They did not specify that, that I see.</p> <p>14 MS. DAVIDSON: Okay. Let's mark as</p> <p>15 Exhibit 12 -- let's mark as Exhibit 12 Wu</p> <p>16 2009.</p> <p>17 (MOORMAN EXHIBIT 12, Markers of</p> <p>18 inflammation and risk of ovarian cancer in</p> <p>19 Los Angeles County, was marked for</p> <p>20 identification.)</p> <p>21 BY MS. DAVIDSON:</p> <p>22 Q. Are you familiar with that paper?</p> <p>23 A. I'm sorry. Wu --</p> <p>24 Q. Wu 2009.</p> <p>25 MR. TRANGLE: Wu 2009.</p>

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1 THE WITNESS: Wu. Wu.
 2 MS. PARFITT: It's W-U.
 3 BY MS. DAVIDSON:
 4 Q. We're getting it for you.
 5 A. Okay. All right.
 6 Q. This is going to be Exhibit 12 as soon
 7 as we put a sticker on it.
 8 A. Okay.
 9 Q. Anna Wu, et al., "Markers of
 10 inflammation and risk of ovarian cancer in
 11 Los Angeles County."
 12 A. Yeah.
 13 Q. Okay.
 14 A. Uh-huh.
 15 Q. This -- this paper is on your reliance
 16 list, right?
 17 A. Yes.
 18 Q. If we go down to Table 2, there's a
 19 section entitled "Frequency and duration of talc
 20 use," correct?
 21 A. Yes.
 22 Q. And for greater than 10 times per
 23 month but less than 30 times per month; do you see
 24 that?
 25 A. So --

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1 MS. PARFITT: It starts with the
 2 years.
 3 THE WITNESS: Okay. So --
 4 MR. TRANGLE: The years.
 5 MS. DAVIDSON: Yeah.
 6 BY MS. DAVIDSON:
 7 Q. So let's look at -- let's look at 10
 8 to 20 years of use.
 9 A. I'm sorry. I'm not seeing 20 to --
 10 MS. PARFITT: And I'm not seeing it
 11 on --
 12 THE WITNESS: -- 10 to 20 years of
 13 use.
 14 BY MS. DAVIDSON:
 15 Q. This is really hard on my eyes, but I
 16 thought it says less than 20 years and greater
 17 than 10 years. Am I reading that wrong?
 18 MS. PARFITT: No, no. Less than 20
 19 years and less than or equal to 10 times
 20 per month.
 21 (Off-the-record conference.)
 22 BY MS. DAVIDSON:
 23 Q. So apologies for my bad eyesight, but
 24 what I'm trying to look at is for less than or
 25 equal to 20 years and greater than 10 to less than

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1 30 times per month. Do you see that?
 2 A. I --
 3 MS. PARFITT: So that's the second
 4 column.
 5 THE WITNESS: The second --
 6 BY MS. DAVIDSON:
 7 Q. Row.
 8 A. -- second row under --
 9 Q. Not column.
 10 A. -- that category. Okay.
 11 MS. DAVIDSON: I'm getting you back
 12 because you made fun of my eyes.
 13 BY MS. DAVIDSON:
 14 Q. Okay. So what is the risk ratio
 15 there?
 16 A. It is 1.16.
 17 Q. Is it statistically significant?
 18 A. The confidence interval goes from .63
 19 to 2.12, so it is not statistically significant.
 20 Q. Is 10 times per month at least 2 times
 21 per week?
 22 A. At least -- is 10 times per month at
 23 least 2 times per week? Yes. You could -- you
 24 could quibble someone used it in a different
 25 manner. But, yeah, we'll -- we'll go with that.

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1 Q. Okay. So that metric would satisfy
 2 the definition of at least 2 times per week,
 3 correct?
 4 MS. PARFITT: Objection. Form.
 5 THE WITNESS: Yes. And it met the
 6 metric for including the study in -- in
 7 there, in the analysis.
 8 BY MS. DAVIDSON:
 9 Q. And if you look at less than 20 years
 10 and greater than 30 times per month, we can all
 11 agree that -- I hope -- that greater than 30 times
 12 per month is more than 2 times a week?
 13 A. Yes.
 14 Q. And what's the risk ratio of that?
 15 A. 1.23.
 16 Q. And is that statistically significant?
 17 A. The confidence interval is 0.63 to
 18 2.41. So it is not statistically significant.
 19 Q. And Woolen chose not to use that
 20 either, right?
 21 A. As Woolen described in their paper,
 22 they opted to go with the most frequent powder use
 23 reported.
 24 Q. I understand.
 25 A. So they did not --

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1 MS. PARFITT: Let her finish.
 2 THE WITNESS: They did not
 3 specifically use that. They went with the
 4 criteria that they laid out in their paper
 5 for the analysis they performed.
 6 BY MS. DAVIDSON:
 7 Q. And if you look at frequency and
 8 duration of talc use, in fact, the -- the data
 9 that they use for their meta-analysis is actually
 10 the only statistically significant increased risk
 11 reported in this table, correct?
 12 A. In this table, they report a number
 13 of --
 14 Q. I'm talking about for frequency and
 15 duration of talc use.
 16 A. Okay. Just that one section of the
 17 table. That is the only one that is statistically
 18 significant. And, of course, as you well know,
 19 statistical significance is driven in part by
 20 sample size. And when you look at these
 21 categories, the numbers within the individual
 22 categories are -- are pretty small. So it's not
 23 too surprising that some of these are not
 24 statistically significant.
 25 Q. I have a question. Has anyone done a

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1 study as to whether recall bias affects
 2 recollections of frequency of use?
 3 A. I am not aware of such a study, and
 4 without having kind of a gold standard of how much
 5 was really used and how frequently, I don't know
 6 how such a study could actually be done.
 7 Q. In Schildkraut, you looked at recall
 8 bias based on ever use and never use, right?
 9 A. We did that in relation to a
 10 certain -- a certain time point, yeah, a certain
 11 time frame.
 12 Q. Did you also look at reports of
 13 frequency?
 14 A. I don't recall if we did that or not.
 15 Q. I'd like to go back to the Davis
 16 paper.
 17 MR. TRANGLE: Exhibit 7.
 18 MS. DAVIDSON: Huh?
 19 MR. TRANGLE: Exhibit 7.
 20 BY MS. DAVIDSON:
 21 Q. I have to find it first before we can
 22 go back to it. Do you have that in front of you?
 23 We talked a little bit earlier about
 24 whether any papers have defined "frequent genital
 25 powder use" differently from -- differently from

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1 Woolen, and you couldn't recall any such papers.
 2 Do you remember that conversation?
 3 A. Frequent?
 4 Q. Yes.
 5 A. Yeah, I recall that conversation.
 6 Q. And had you forgotten that the Davis
 7 paper actually has a definition for "frequent
 8 genital powder use"?
 9 A. Are you getting -- I know that we had
 10 frequency of use and we had some categories.
 11 Q. If you look at Table 1, doesn't the
 12 Davis paper define "frequent genital powder use"
 13 as greater than monthly?
 14 A. Yeah. I mean, that was the definition
 15 guided by the availability of the data.
 16 Q. You hadn't recalled that when we
 17 discussed papers defining --
 18 A. I didn't recall -- I recall that we
 19 used those categorizations of frequency. I didn't
 20 recall the actual frequent genital powder use, the
 21 heading that was used here. I was well aware that
 22 we had categorized it by less than once a week or
 23 greater than once a week.
 24 Q. So you and your co-authors defined
 25 "frequent genital powder use" differently from

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1 Woolen, correct?
 2 A. The definition that we used was based
 3 on the availability of the data from the
 4 individual studies. As you're aware of, this was
 5 a consortium that used data from five different
 6 studies. And we had to harmonize the data,
 7 because some of the studies collected the data
 8 in -- in different manners, different
 9 categorizations and so on.
 10 And so that was the decision that was
 11 driven by the -- how the data were put together in
 12 the individual studies and how we could harmonize
 13 it to do the analysis.
 14 Q. Is it your testimony that you picked
 15 once per week and not twice per week because these
 16 studies would not have allowed you to do a
 17 twice-per-week analysis?
 18 A. Yeah. They -- each of the studies
 19 used slightly different phrasing in terms of
 20 relation to frequency. And so I don't recall all
 21 of the, you know, specific details as to how we
 22 settled on that cut point. But I know that it was
 23 based -- you know, as it typically is when you're
 24 trying to harmonize data from different studies,
 25 how you can combine the data from the various

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1 studies.

2 Q. Are you testifying here today that the

3 exposure assessments in the underlying studies for

4 the Davis paper would not have enabled you to

5 choose 2 times per week?

6 A. I'm really not -- not sure. Some of

7 them, it looks like the number of days per week.

8 Some -- some it was reported a bit differently.

9 And like I said, I'm just -- I don't recall the

10 particular discussion that led to that.

11 Q. So sitting here today, you don't know

12 why Davis defines "frequent use" differently from

13 Woolen, correct?

14 MS. PARFITT: Objection. Misstates

15 her testimony.

16 THE WITNESS: Just -- give me just a

17 moment. I just don't recall that

18 discussion as to why that -- that

19 particular cut point was used.

20 BY MS. DAVIDSON:

21 Q. Do you recall if you were part of the

22 decision to define "frequent genital powder use"

23 as more than once per week?

24 A. I -- the way that these -- these

25 papers worked, the lead authors, they typically

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1 would do the work. They would share it with the

2 other authors -- the lead authors would take the

3 lead on the analysis. They would share it with

4 the co-authors during our monthly or biweekly

5 meetings, and so not every decision was discussed

6 in great detail.

7 I -- I just don't remember

8 specifically. This is one of many papers from

9 this consortium, and I don't recall the particular

10 discussion.

11 (Off-the-record conference.)

12 BY MS. DAVIDSON:

13 Q. Let's look at O'Brien 2023 --

14 A. Okay.

15 Q. -- which we will mark -- here, we'll

16 mark it as Exhibit 13.

17 (MOORMAN EXHIBIT 13, Douching and

18 Genital Talc Use: Patterns of Use and

19 Reliability of Self-reported Exposure, was

20 marked for identification.)

21 BY MS. DAVIDSON:

22 Q. Exhibit 13 is "Douching and Genital

23 Talc Use: Patterns of Use and Reliability of

24 Self-reported Exposure," O'Brien, 2023.

25 A. Yes. I have a detached version in

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1 here.

2 Q. And you've agreed that none of the

3 authors of this paper, O'Brien, Ogunsina,

4 Wentzensen or Sandler, are experts in this

5 litigation?

6 A. To my knowledge, none of them are.

7 Q. And, in fact, O'Brien and

8 Wentzensen -- right? -- they work for NIH, right?

9 A. Correct. Well, I know --

10 Q. Unclear if you can even -- if they

11 would even be allowed to be experts in litigation.

12 I don't know the answer to that question, do you?

13 A. I think that -- I think that I have

14 heard that government employees cannot be, but --

15 Q. Got it.

16 A. -- I don't know.

17 Q. Okay.

18 A. I have heard that, but I don't know

19 that that's to be -- that's true or not.

20 Q. Okay. Do you have a copy of this that

21 Asher gave you?

22 A. I do.

23 Q. Okay. Great.

24 You had said something earlier today

25 that there was language in O'Brien 2023 about

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1 average age when women start using talc powder

2 products, so you wanted to see the paper.

3 A. Uh-huh.

4 Q. So here it is. Do you want to just go

5 back and let me know what O'Brien 2023 says about

6 the average age of initiation of talc use.

7 A. Okay. I am looking at Table 2, and

8 they reported the age at first use, the mean in

9 standard deviation across a number of categories,

10 race ethnicity and by educational level. And for

11 the women -- the total group of women, the average

12 age of first use is 21 years.

13 Q. Okay. And let's introduce as

14 Exhibit 14 a paper by Dr. Cramer, which I believe

15 you've also relied on in the past, "The

16 Association Between Talc Use and Ovarian Cancer:

17 A Retrospective Case-Control Study in Two US

18 States. Lead author, Daniel Cramer, May 2016.

19 That's Exhibit 14.

20 (MOORMAN EXHIBIT 14, The Association

21 Between Talc Use and Ovarian Cancer: A

22 Retrospective Case-Control Study in Two US

23 States, was marked for identification.)

24 BY MS. DAVIDSON:

25 Q. Do you recall whether Dr. Cramer's

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1 paper -- do you recall whether Dr. Cramer's paper
 2 addresses first age of use of ovarian cancer
 3 [sic]?
 4 A. I didn't recall the specific details
 5 of this particular paper, but I do see here in
 6 Table 1 that they report age at first use of
 7 genital powder.
 8 Q. Uh-huh.
 9 A. And -- okay. And among the women who
 10 had used it -- let's see. So those percentages
 11 don't lend itself to how I'd like to do this.
 12 So there are roughly 550 control
 13 subjects who reported use of talc, and 343 of them
 14 reported that they were younger than 20 at first
 15 use. And the proportions are not very different
 16 among the case subjects -- yeah. Did you follow
 17 what I said?
 18 Q. Yes. But my math isn't as good as
 19 yours, and I would call something more
 20 straightforward in here that provides that
 21 information.
 22 In any event, does this paper more or
 23 less comport with O'Brien in terms of when women
 24 start using talcum powder?
 25 A. Yeah. It's not too far off. They

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1 report it a little bit differently, and it's
 2 like -- a mean age in the O'Brien study was around
 3 21. And they report it in categories here but --
 4 of women who have used talc, the majority of them
 5 certainly start using it before age 20. So they
 6 seem to be in the same ballpark.
 7 Q. And we can all agree that that's a
 8 good decade before?
 9 MS. PARFITT: Before what?
 10 BY MS. DAVIDSON:
 11 Q. At least a decade --
 12 A. I'm -- I'm not --
 13 MS. PARFITT: You said "before."
 14 THE WITNESS: -- following your
 15 question.
 16 MS. PARFITT: I didn't follow you.
 17 MS. DAVIDSON: You said, "Before
 18 what?" I wasn't done with my question.
 19 MS. PARFITT: Oh, oh, oh, oh, I'm
 20 sorry.
 21 THE WITNESS: I'm so sorry.
 22 MS. PARFITT: Okay. I thought you
 23 were, like, done. Okay.
 24 MS. DAVIDSON: You were just, like,
 25 ready to pounce on me.

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1 MS. PARFITT: No, I am not. I was
 2 anxiously --
 3 MS. DAVIDSON: I was in the middle of
 4 a question. That's --
 5 MS. PARFITT: -- holding onto each one
 6 of your questions.
 7 MS. DAVIDSON: I see.
 8 BY MS. DAVIDSON:
 9 Q. You had testified earlier that tubal
 10 ligation typically would take place in women 30s
 11 or 40s, correct?
 12 A. Yes. I think that the -- I believe
 13 that I have read data that indicates it around
 14 30 -- in the 30s sometime is the typical age of
 15 tubal ligation. Average age, you know.
 16 Q. So the average age for the beginning
 17 of talc use is long before the average age for
 18 tubal ligation or other surgeries that would
 19 result in a woman not having patent tubes,
 20 correct?
 21 MS. PARFITT: Objection. Form.
 22 THE WITNESS: Okay. That the average
 23 age of the tubal ligation is -- is ten
 24 years or so than the average age of
 25 initiation of talc use from these studies.

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1 BY MS. DAVIDSON:
 2 Q. More than ten years because 31 is your
 3 early 30s, right?
 4 A. You know, you're asking me to recall
 5 things -- some data that I'm not sure when I would
 6 have read it. So I can't say exactly.
 7 MS. DAVIDSON: Okay. I need to take a
 8 break.
 9 * * *
 10 (Whereupon, there was a recess in the
 11 proceedings from 2:31 p.m. to 3:16 p.m.)
 12 * * *
 13 MS. DAVIDSON: Apologizing for those
 14 on Zoom as well for the break, and I
 15 appreciate your courtesy.
 16 BY MS. DAVIDSON:
 17 Q. When we went off the record, I think
 18 we were talking about O'Brien 2023. And O'Brien
 19 2023 looks into the reliability of self-reported
 20 exposure, correct?
 21 A. Among other things, yes.
 22 Q. And the author states in the
 23 introduction that if historic use cannot be
 24 accurately recalled, measurement error can bias
 25 effect estimates, especially if recall reliability

<p style="text-align: right;">Page 178</p> <p>1 differs by outcome status. Do you agree with 2 that?</p> <p>3 A. That is his theoretic concern, yes.</p> <p>4 Q. When you say it's a theoretic concern, 5 what do you mean by "theoretic"?</p> <p>6 A. It doesn't necessarily mean that it is 7 biased, but it is a potential bias.</p> <p>8 Q. Well, if people can't remember how 9 frequently they used a product, and if the recall 10 reliability differs by outcome status, then you're 11 going to have a bias problem, right?</p> <p>12 MS. PARFITT: Objection. Form.</p> <p>13 THE WITNESS: That's what I'm saying, 14 that it is a theoretical concern. And 15 we're not disagreeing here. I'm saying, 16 yes, I agree that it is a potential 17 concern.</p> <p>18 BY MS. DAVIDSON:</p> <p>19 Q. And did O'Brien look at the question 20 of accuracy in reports of frequency of use?</p> <p>21 A. I don't recall them reporting that.</p> <p>22 I -- I see in -- I can -- I see in the table that 23 they're comparing ever use of the talc at the 24 different time points, but --</p> <p>25 Q. I did not find in O'Brien 2023 any</p>	<p style="text-align: right;">Page 180</p> <p>1 use in the 12 months prior to enrollment was 14 2 percent.</p> <p>3 Q. Uh-huh.</p> <p>4 A. And they're supposed to be comparing 5 what was reported at enrollment to what was 6 reported for that same time period in the 7 follow-up.</p> <p>8 And so it can't be 27 percent, because 9 it was 14 percent at the original baseline. If we 10 can look at the Supplemental Table 6, I can point 11 out what I think is the error.</p> <p>12 Q. Did you consider that the possibility 13 was that 14 percent was 12 months prior and 27 14 percent was the women who were 12 months prior and 15 who reported use in adolescence?</p> <p>16 MS. PARFITT: Objection. Form.</p> <p>17 THE WITNESS: But that's not what 18 they're reporting on. Okay. Let's --</p> <p>19 BY MS. DAVIDSON:</p> <p>20 Q. What do you mean by that?</p> <p>21 A. Okay.</p> <p>22 Q. If you look at Table 3 --</p> <p>23 MS. PARFITT: Wait. She's in the 24 middle of something, Jessica. Hold on.</p> <p>25 THE WITNESS: Yeah. Just -- and it is</p>
<p style="text-align: right;">Page 179</p> <p>1 discussion about any analysis of whether frequency 2 of use had been reported accurately, did you?</p> <p>3 A. I don't recall seeing that. I don't 4 know if there's any sentence in there or not 5 that -- that addresses it. I just don't recall 6 that.</p> <p>7 Q. Okay. And O'Brien found that women 8 who -- among women with intervening ovarian cancer 9 diagnoses, 28 percent had originally reported talc 10 powder use, but that figure increased to 11 33 percent at follow-up, correct?</p> <p>12 A. No, I do not think that is correct at 13 all. Okay.</p> <p>14 Q. That's what O'Brien stated, right?</p> <p>15 A. They stated it, and as I stated in my 16 report, using the data that they have here, it is 17 an obvious error.</p> <p>18 Q. Okay. And why don't you tell me what 19 you think that error is.</p> <p>20 A. Okay. So they were comparing ever use 21 of genital talc, how it was reported at two time 22 points.</p> <p>23 Q. Uh-huh.</p> <p>24 A. And it was based on ever use, 12 25 months before enrollment. And so in Table 3, ever</p>	<p style="text-align: right;">Page 181</p> <p>1 really very critical to look at --</p> <p>2 BY MS. DAVIDSON:</p> <p>3 Q. Uh-huh.</p> <p>4 A. -- the table -- supplemental -- I 5 think it's Supplemental Table 6. Okay. So what 6 they state --</p> <p>7 MS. DAVIDSON: We can mark 8 Supplemental Table 6 as an exhibit as well. 9 I was going to be marking it later, but...</p> <p>10 THE WITNESS: Okay. But anyhow...</p> <p>11 BY MS. DAVIDSON:</p> <p>12 Q. Uh-huh.</p> <p>13 A. Okay. What they are stating on 14 Page 383 -- it's the paragraph above the 15 discussion --</p> <p>16 Q. Uh-huh.</p> <p>17 A. -- it said -- and the reliability 18 measures for genital talc use were similar for 19 ovarian cancer compared to the full sample. 20 However, while self-reported use in the 12 months 21 before enrollment, it was more commonly reported 22 on the enrollment questionnaire relative to the 23 fourth detailed questionnaire. And then they go 24 on to say that --</p> <p>25 Q. Uh-huh.</p>

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1 A. -- that was --
 2 Q. Right.
 3 A. They go on. But self-reported use of
 4 talc in the 12 months before enrollment was not 27
 5 percent, according to what they reported. It
 6 was --
 7 Q. Correct.
 8 A. -- 14 percent.
 9 Q. Right. So that was just a
 10 typographical error here --
 11 A. No.
 12 Q. -- and they meant -- because 27
 13 percent and 21 percent do correlate to 12 months
 14 prior and use in adolescence, correct?
 15 A. That's not what they're -- they're
 16 saying --
 17 Q. But --
 18 A. -- there. They --
 19 MS. PARFITT: Let her finish, please.
 20 BY MS. DAVIDSON:
 21 Q. And, again --
 22 MS. PARFITT: Let her finish, Jessica.
 23 THE WITNESS: -- I think that if we
 24 look at the supplemental table --
 25 BY MS. DAVIDSON:

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1 Q. Uh-huh.
 2 A. -- it becomes much more clear. And I
 3 believe the typo and then the description of the
 4 typo arises from this table. So when you look up
 5 here, under douching, it said: Percent use in 12
 6 months prior to enrollment --
 7 Q. Uh-huh.
 8 A. -- 14 percent.
 9 Q. Uh-huh.
 10 A. That's not what was reported for
 11 douching. 27 percent was the prevalence of
 12 douching in the 12 months prior to enrollment.
 13 What I believe happened is that they
 14 just switched the headings because this is
 15 consistent with the data that's reported in the
 16 body of the paper. This, I think, they just made
 17 a rather significant mistake.
 18 Q. If you look at the top -- right?
 19 A. Yeah.
 20 Q. -- eTable 6, it says: self-report
 21 ever use of douche or genital talc. Correct?
 22 A. I'm looking at what's the heading
 23 directly above -- above this here.
 24 Q. Right.
 25 A. "% used in 12 months prior to

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1 enrollment."
 2 Q. But the typo is the heading, not the
 3 percentage, right?
 4 A. The typo is here. These are switched.
 5 The percent use of talc in the 12 months prior to
 6 enrollment was 14 percent.
 7 And then the percent douching -- let's
 8 see. Okay. It's -- I'm just trying -- what they
 9 are saying here certainly makes -- is more
 10 consistent with what is reported in the rest of
 11 the paper with the exception of that paragraph.
 12 MS. PARFITT: And for the record, your
 13 "here" is Supplemental Table 6?
 14 THE WITNESS: Yes.
 15 MS. PARFITT: Thank you.
 16 BY MS. DAVIDSON:
 17 Q. Can I ask you a question? If you look
 18 at Table 2 --
 19 A. Uh-huh.
 20 Q. -- on ever use of talc --
 21 A. Yeah.
 22 Q. -- what's the percentage reported
 23 there? Table 2, O'Brien 2023 --
 24 A. Yeah.
 25 Q. -- ever use of talc, what's the

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1 percentage reported?
 2 A. It's 27 percent, but what they are --
 3 Q. That's the same 27 --
 4 MS. PARFITT: Wait.
 5 BY MS. DAVIDSON:
 6 Q. And that's the same number as there is
 7 in Supplemental eTable 6, right?
 8 A. But what -- that's not what they're
 9 describing. They're describing the comparison of
 10 the 12 months prior to enrollment --
 11 Q. Correct.
 12 A. -- in their --
 13 MS. PARFITT: Please let her finish.
 14 THE WITNESS: -- in their -- yeah, in
 15 the discussion, they are saying
 16 self-reported use in the 12 months -- 12
 17 months before enrollment. And that was --
 18 that's not what they present in other parts
 19 of their paper and --
 20 BY MS. DAVIDSON:
 21 Q. But my question is: If you look at
 22 eTable 6 and it says ever use of talc, that 27
 23 percent would be accurate but for that heading on
 24 top of it, if -- if --
 25 A. I mean --

<p style="text-align: right;">Page 186</p> <p>1 Q. 27 percent is the correct figure for 2 ever use of talc, correct? 3 A. Well, again, what's labeled here is 4 not -- 5 MS. PARFITT: And if you can identify 6 "here" -- I'm sorry -- 7 THE WITNESS: Yeah. 8 MS. PARFITT: -- so we can have it 9 correct. 10 THE WITNESS: What's labeled -- where 11 it says "Genital Talc Use," I'm just 12 looking at percent used in 12 months prior 13 to enrollment and then the follow-up, and 14 that 12 months prior to enrollment and 15 follow-up is what they're describing in the 16 text, and it just doesn't match up. 17 BY MS. DAVIDSON: 18 Q. But -- but I'm asking you a different 19 question, and my question is: It does match up, 20 that 27 percent, to the heading for eTable 6, 21 correct? 22 A. Again, but, you know, there -- there's 23 an error here. And so when there's an obvious 24 error, I mean, it matches up, the 20 percent ever, 25 but it's not what they're describing in the paper.</p>	<p style="text-align: right;">Page 188</p> <p>1 BY MS. DAVIDSON: 2 Q. There's a typo. 3 A. Well, I mean, it's -- what they're 4 describing in the text is not matching up with the 5 table, and so it raises concerns. 6 Q. But wait a minute. The 14 percent and 7 27 percent in eTable 6 match up perfectly with 8 ever use in the article; is that correct? Can we 9 agree on that? 10 A. It matches up with ever -- their ever 11 use, but that's not what the authors are 12 describing here. 13 Q. But -- but the heading of the table 14 says "ever use," correct? 15 A. We -- there are inconsistencies; we 16 can agree on all of that. And when there are 17 inconsistencies, we -- 18 Q. That's not what I'm asking you. I'm 19 asking you: Does the heading of this table say 20 "ever use," eTable 6? 21 A. It -- it does. 22 Q. Okay. And are 14 percent and 23 27 percent accurate for ever use? That's all I'm 24 asking. 25 A. Yes.</p>
<p style="text-align: right;">Page 187</p> <p>1 And so we know that there's an error. 2 We don't know exactly what it is. But -- but it 3 certainly reduces the confidence in what they're 4 reporting in their paper. 5 Q. So 14 percent is the correct number 6 for ever use of douching, right? 7 A. I -- that's what they report in 8 Table 1. 9 Q. So really what's going on is that 10 eTable 6 is reporting ever use instead of last 11 12-month use, correct? 12 A. We don't know. 13 Q. What do you mean "We don't know"? The 14 numbers match. 15 A. Well, we know that there's an error 16 and -- 17 Q. There's a typo, right? 18 MS. PARFITT: Wait. Jessica, we -- 19 honestly, I -- 20 THE WITNESS: Yeah. 21 MS. PARFITT: Just one person at a -- 22 BY MS. DAVIDSON: 23 Q. Okay. 24 MS. PARFITT: -- time will be helpful. 25 THE WITNESS: Yeah, we know that --</p>	<p style="text-align: right;">Page 189</p> <p>1 Q. Okay. We can move on. 2 THE REPORTER: Did we want that 3 marked? 4 MR. TRANGLE: Yeah. 5 MS. DAVIDSON: Yeah. We can mark 6 eTable 6. I'm sorry. 7 (MOORMAN EXHIBIT 15, Supplemental 8 eTable 6, was marked for identification.) 9 MS. DAVIDSON: Okay. We're marking as 10 Exhibit 15, after we discussed it, 11 Supplemental Table 6 from O'Brien 2023 as 12 Exhibit 15. 13 BY MS. DAVIDSON: 14 Q. Since you were concerned about the 15 headings on eTable 6, did you send a letter to 16 Dr. O'Brien asking her about it? 17 A. I have thought about it, but I have 18 not done it. 19 Q. Got it. 20 Okay. When Gonzalez reported on the 21 sister study, it used the 14 percent number that 22 was just use in the prior 12 months, correct? 23 A. That is correct. 24 Q. And when -- 25 A. 12 months prior to enrollment, yes.</p>

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1 Q. And when O'Brien looked at the sister
 2 study, it used the higher 27 percent ever use
 3 number from the sister study, right?
 4 A. Let me just double-check that. I
 5 believe that is correct. Yes, that is correct.
 6 Q. So O'Brien addressed one of your
 7 criticisms of Gonzalez, correct?
 8 A. Yes. To some degree, yes.
 9 Q. Well, that -- that criticism of
 10 Gonzalez was addressed?
 11 A. I said, to some degree --
 12 Q. Why only to some degree?
 13 A. Because they addressed use from -- I
 14 think it was age 10 to 13 and use from one year
 15 prior to enrollment. So any use between age 13
 16 and their age at enrollment was not captured.
 17 Q. Do you know, on average, for women who
 18 have used talcum powder in their genital area how
 19 many years they usually use it?
 20 A. O'Brien did report some of that. I'm
 21 sorry. I'm -- and I thought that it was in here,
 22 but I don't see where they reported how long they
 23 had used it on average.
 24 Q. Do you recall any papers by Cramer or
 25 otherwise that address the typical length of time

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1 women who have used perineal talc use it for?
 2 MS. PARFITT: Objection. Form.
 3 THE WITNESS: Many papers have
 4 reported on the duration of talc use. And
 5 many of them reported in categories rather
 6 than a mean duration of use. And I'm --
 7 again, you know, all of the little details,
 8 it's hard to remember across all of the
 9 studies.
 10 BY MS. DAVIDSON:
 11 Q. Do you know if the typical woman who
 12 uses talc uses it for more or less than ten years?
 13 A. I mean, there's a wide variation in
 14 patterns of talc use. There are certainly many,
 15 many long-term users and some that -- you know, as
 16 we have seen in our studies, some that report
 17 short-term use.
 18 Q. On average, do women who use talc use
 19 it for more or less than ten years?
 20 A. I -- I can't give an average. I'm
 21 sorry.
 22 Q. Okay. So in your report, when you say
 23 that O'Brien 2023 casts serious doubt on Gonzalez,
 24 that's actually addressed by O'Brien 2020, right?
 25 MS. PARFITT: Objection. Misstates

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1 her testimony.
 2 THE WITNESS: What I said in my
 3 report, the -- I think it was in relation
 4 to the O'Brien study -- I said that it did
 5 somewhat address it. But as I just stated
 6 a few minutes ago, any use between age 13
 7 and a year before enrollment into the
 8 cohort would not have been captured. And,
 9 you know, we -- so it helped, but it didn't
 10 completely address it.
 11 BY MS. DAVIDSON:
 12 Q. How come in your report when you said
 13 that O'Brien 2023 cast serious doubts on Gonzalez,
 14 you didn't mention that O'Brien 2020 helps to
 15 address that?
 16 A. I -- I think that I made -- I know
 17 that I made a true statement there. What we
 18 learned from Gonzalez -- or from the O'Brien in
 19 relation to the Gonzalez is that the exposure
 20 measurement used in Gonzalez misclassified over
 21 half of the talc users.
 22 So there were around 30 percent ever
 23 talc users, and they said 14 percent. That was
 24 the prevalence of use in the Gonzalez study. So
 25 it was, like, even worse than a coin flip in terms

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1 of classifying talc exposure among the women who
 2 had used it.
 3 And the reason why I think that it's
 4 important is that many of the meta-analyses report
 5 the Gonzalez relative risk -- that was -- like,
 6 the .73, that was what they reported. And it's
 7 always been an outlier. It's one of the most
 8 extreme values reported. And this -- given the
 9 information we have about the level of exposure
 10 misclassification, it does cast doubt on the
 11 Gonzalez study.
 12 Q. Do you remember my question?
 13 A. Well, I asked -- you know, I -- I'm
 14 explaining why I thought it was important to
 15 mention that, and I think that the statement is
 16 true.
 17 I did also put in my report, when
 18 describing the O'Brien study, that -- the O'Brien
 19 study combining the four cohorts, that they did do
 20 a better job, but there was still limitations.
 21 Q. But when you say there's serious doubt
 22 in the Gonzalez study, you don't mention that
 23 O'Brien nearly doubled the prevalence of talc use
 24 and still found no significantly -- statistically
 25 significant association, correct?

<p style="text-align: right;">Page 194</p> <p>1 MS. PARFITT: Objection. Asked and 2 answered. 3 THE WITNESS: Please, would you repeat 4 the question? 5 MS. DAVIDSON: Would you repeat it? I 6 can't remember it. 7 (The following question was read back: 8 Q: But when you say there's serious 9 doubt in the Gonzalez study, you don't 10 mention that O'Brien nearly doubled the 11 prevalence of talc use and still found no 12 significantly -- statistically significant 13 association, correct?) 14 THE WITNESS: We have already 15 discussed what was found. It was a 16 considerable change in the odds ratio, and 17 it went from .73 to just slightly above 1 18 in the sister study. 19 BY MS. DAVIDSON: 20 Q. But not statistically significant, 21 correct? 22 A. It was not statistically significant, 23 no. 24 Q. Okay. Great. Let's move on. 25 Have you ever cited in a published</p>	<p style="text-align: right;">Page 196</p> <p>1 Q. Okay. Did Health Canada, to your 2 recollection -- and if you don't recall, that's 3 fine. But do you recall if they did an assessment 4 of subtypes of ovarian cancer? 5 A. Again, I -- off the top of my head, 6 I -- I -- you know, I want to be correct. And off 7 the top of my head, I -- I can't remember. There 8 are a lot of papers we have been talking about and 9 I have read recently, so... 10 Q. Okay. Do you think there's sufficient 11 data to assess any potential association or causal 12 relationship between cosmetic talc and each 13 individual subtype of epithelial ovarian cancer? 14 MS. PARFITT: Objection. Asked and 15 answered quite a few hours ago. 16 MS. DAVIDSON: I didn't ask it. 17 THE WITNESS: That's -- that's exactly 18 what I was going to -- 19 MS. DAVIDSON: Well, then let's repeat 20 the question because I didn't ask the 21 question, so maybe you didn't hear it 22 right. Can you repeat the question? 23 (The following question was read back: 24 Q: Do you think there's sufficient 25 data to assess any potential association or</p>
<p style="text-align: right;">Page 195</p> <p>1 paper a -- the regulatory findings of an 2 organization as support for your epidemiological 3 opinions? 4 A. I'm just trying to think. I cannot 5 come up with an example off the top of my head. 6 It's very likely, very possible that I did, but I 7 can't come up with a specific example. 8 Q. Do you think there's enough 9 information in the ovarian cancer talc literature 10 to permit a fulsome assessment of biological 11 gradient/dose-response? 12 A. That has been addressed in several 13 reports. Like, notably in the Health Canada 14 report, they talked about that and noted some of 15 the limitations in assessing the dose-response. 16 And it's recognized as an area where more complete 17 data would be desirable. 18 Q. My question was: Do you agree with 19 the statement -- do you, Dr. Moorman, agree with 20 the statement that there is significant exposure 21 information lacking to permit a fulsome assessment 22 of biological gradient/dose-response? 23 A. There are a lot of qualifiers in 24 there, and I -- I don't think that I would 25 necessarily agree with that statement.</p>	<p style="text-align: right;">Page 197</p> <p>1 causal relationship between cosmetic talc 2 and each individual subtype of epithelial 3 ovarian cancer?) 4 MS. PARFITT: Same objection. Asked 5 and answered. 6 THE WITNESS: You asked me earlier 7 today about certain subtypes, and my 8 response to that question was that most of 9 the studies reported on ovarian cancer as a 10 whole. Some studies did subtype analysis, 11 but most of it was based on ovarian cancer 12 across all subtypes. 13 BY MS. DAVIDSON: 14 Q. And that's why I'm asking you, do you 15 think that there's enough studies that address 16 subtypes in particular to reach a causal 17 conclusion about subtypes? 18 MS. PARFITT: Objection. 19 BY MS. DAVIDSON: 20 Q. That's exactly what I'm asking. 21 That's not what I asked before. 22 MS. PARFITT: Objection. Broad. 23 Form. Asked and answered. 24 THE WITNESS: I -- you know, I have 25 stated what I believe the data show, that</p>

<p style="text-align: right;">Page 198</p> <p>1 we can -- that the bulk of the evidence is</p> <p>2 based on ovarian cancer as a whole. And</p> <p>3 I'm -- I -- I'm just -- I don't -- I think</p> <p>4 that there -- there is some good subtype</p> <p>5 data. It would certainly be desirable to</p> <p>6 have more.</p> <p>7 BY MS. DAVIDSON:</p> <p>8 Q. What -- do you think there's good</p> <p>9 subtype data on clear cell carcinoma?</p> <p>10 MS. PARFITT: Objection. Asked and</p> <p>11 answered. That was asked and specifically</p> <p>12 answered.</p> <p>13 THE WITNESS: I believe the question</p> <p>14 you asked earlier today was -- was very</p> <p>15 similar to that, and I -- you know, I did</p> <p>16 reply. It's, like, the -- the data has</p> <p>17 been reported in some studies by subtypes,</p> <p>18 but the -- the most studies are -- have</p> <p>19 been reporting by epithelial ovarian cancer</p> <p>20 overall.</p> <p>21 BY MS. DAVIDSON:</p> <p>22 Q. I'm sorry. You said that there was</p> <p>23 some science on subtypes. I'm asking you: What,</p> <p>24 if any, science is there on the subtype of clear</p> <p>25 cell cancer?</p>	<p style="text-align: right;">Page 200</p> <p>1 the cellular level. And I fully</p> <p>2 acknowledge I am not a laboratory</p> <p>3 scientist, and so I looked at them from a</p> <p>4 rather high level. But let's see. Let me</p> <p>5 just --</p> <p>6 BY MS. DAVIDSON:</p> <p>7 Q. So just to narrow it down, I don't</p> <p>8 need all the studies you read. I just need to</p> <p>9 know, what studies since 2019 do you -- are you</p> <p>10 relying on to support your opinion that biological</p> <p>11 plausibility is satisfied? And maybe the answer</p> <p>12 is none. I don't know.</p> <p>13 MS. PARFITT: And, Jessica, I do think</p> <p>14 you made it clear, and I appreciate that.</p> <p>15 And that would be: If you talked about it</p> <p>16 pre-'19, you don't have to talk about it.</p> <p>17 Jessica is asking specifically --</p> <p>18 THE WITNESS: Uh-huh.</p> <p>19 MS. PARFITT: -- since 2019. And I</p> <p>20 appreciate that, Jessica.</p> <p>21 BY MS. DAVIDSON:</p> <p>22 Q. Since you didn't do a new Bradford</p> <p>23 Hill analysis, I --</p> <p>24 (Reporter clarification.)</p> <p>25 THE WITNESS: Yeah. Yeah. Among</p>
<p style="text-align: right;">Page 199</p> <p>1 MS. PARFITT: Objection. Asked and</p> <p>2 answered.</p> <p>3 THE WITNESS: I believe that there</p> <p>4 have been some studies that have report --</p> <p>5 reported on the subtypes. I'm having</p> <p>6 difficulty recalling right off the top of</p> <p>7 my head all of the results for all of the</p> <p>8 individual subtypes, including clear cell.</p> <p>9 BY MS. DAVIDSON:</p> <p>10 Q. Can you recall any, any studies on</p> <p>11 clear cell that you think show an association</p> <p>12 between talc use and the development of ovarian</p> <p>13 cancer?</p> <p>14 A. Right off the top of my head, I just</p> <p>15 can't remember the results for the individual</p> <p>16 subtypes.</p> <p>17 Q. Okay. Can you tell me what papers</p> <p>18 you're relying on for your biological plausibility</p> <p>19 opinion since 2019?</p> <p>20 MS. PARFITT: Thank you.</p> <p>21 MS. DAVIDSON: I knew Michelle would</p> <p>22 love that.</p> <p>23 THE WITNESS: There have been several</p> <p>24 papers that I have read since then that</p> <p>25 address some of -- some of the -- mostly at</p>	<p style="text-align: right;">Page 201</p> <p>1 other things, there have been several,</p> <p>2 like, papers at the cellular level that I</p> <p>3 looked at at a high level. You know,</p> <p>4 Fletcher has reported some. Mandarino. I</p> <p>5 believe it's "Emu" [sic]. Another thing</p> <p>6 that I considered as part of the biological</p> <p>7 plausibility was --</p> <p>8 BY MS. DAVIDSON:</p> <p>9 Q. You said "Emu"? I think you meant</p> <p>10 "Emi."</p> <p>11 A. I'm sorry.</p> <p>12 Q. E-M-I. Emu is an animal. Yeah.</p> <p>13 A. Thank you. I know that.</p> <p>14 And among other things that I think I</p> <p>15 relied on in contributing to the biological</p> <p>16 plausibility was some of the FDA analysis and the</p> <p>17 finding of the asbestos in the talc products. And</p> <p>18 then, you know, that, again, just kind of supports</p> <p>19 another biological pathway.</p> <p>20 Q. Do you know how many times the FDA has</p> <p>21 analyzed J&J talc and not found asbestos?</p> <p>22 A. I do not know that. But I would say</p> <p>23 that in a product that many women used for many</p> <p>24 years, if they find it in 1 out of 10, 1 out of</p> <p>25 100, you certainly don't want to be that woman</p>

<p style="text-align: right;">Page 202</p> <p>1 using that 1 out of 100 container, so any --</p> <p>2 Q. We're talking about biological</p> <p>3 plausibility --</p> <p>4 MS. PARFITT: Please let her finish,</p> <p>5 please.</p> <p>6 THE WITNESS: And, again, that -- so</p> <p>7 the fact that you have some -- any exposure</p> <p>8 to asbestos, which numerous -- several</p> <p>9 regulatory and scientific bodies have said</p> <p>10 there is no safe level, I would say that it</p> <p>11 does contribute to the biological</p> <p>12 plausibility. I don't know how common it</p> <p>13 is, but I would wager that most women would</p> <p>14 not want to take the risk of 1 out of 100</p> <p>15 containers has asbestos in it.</p> <p>16 BY MS. DAVIDSON:</p> <p>17 Q. We're talking about biological</p> <p>18 plausibility in that risk, right?</p> <p>19 A. We're talking about biological</p> <p>20 plausibility and its exposure to an agent that</p> <p>21 there is no safe level of exposure to.</p> <p>22 Q. Okay. Can you explain to me the</p> <p>23 biological mechanism by which you think talc</p> <p>24 causes ovarian cancer based on your review of the</p> <p>25 Fletcher, Mandarino and Emi papers?</p>	<p style="text-align: right;">Page 204</p> <p>1 called "Minerva"?</p> <p>2 A. I have heard of it. I wouldn't say</p> <p>3 that I'm very familiar with it.</p> <p>4 Q. Do you know how many journals rejected</p> <p>5 Harper 2023 before they finally were able to</p> <p>6 publish in "Minerva"?</p> <p>7 A. I -- I don't know. Of course I don't</p> <p>8 know.</p> <p>9 Q. Are you aware that plaintiff's counsel</p> <p>10 have all the rejections from Harper 2023?</p> <p>11 MS. PARFITT: Objection. Form.</p> <p>12 THE WITNESS: I am not aware --</p> <p>13 MS. PARFITT: Relevance.</p> <p>14 THE WITNESS: -- of that.</p> <p>15 BY MS. DAVIDSON:</p> <p>16 Q. So plaintiff's counsel didn't share</p> <p>17 with you the many journals that rejected Harper</p> <p>18 2023, correct?</p> <p>19 MS. PARFITT: Objection.</p> <p>20 THE WITNESS: I already told you I do</p> <p>21 not -- do not have any of that.</p> <p>22 BY MS. DAVIDSON:</p> <p>23 Q. If it's outside your area of expertise</p> <p>24 to analyze the reliability of papers like</p> <p>25 Fletcher, Mandarino and Emi, how can you offer an</p>
<p style="text-align: right;">Page 203</p> <p>1 A. As I have stated, I am not a</p> <p>2 laboratory scientist, and I looked at them at a</p> <p>3 very high level. Some of the things that they</p> <p>4 reported on were that it increases some redox --</p> <p>5 rather, some measures of oxidative stress and</p> <p>6 measure of inflammation.</p> <p>7 Q. Which paper is that?</p> <p>8 A. Again, if I can pull the papers out,</p> <p>9 it's -- I looked at them at a very high level</p> <p>10 and --</p> <p>11 Q. When you say you looked at them at a</p> <p>12 very high level, did you evaluate the reliability</p> <p>13 of the Fletcher and Harper papers?</p> <p>14 A. What -- what I have stated is that I'm</p> <p>15 an epidemiologist. I am not a laboratory</p> <p>16 scientist. And so when I go through and read</p> <p>17 those papers, it is outside my area of expertise</p> <p>18 to say if the experiments were done correctly,</p> <p>19 reliably. I -- you know, there's some assumption</p> <p>20 that, you know, it has gone through peer review by</p> <p>21 people who know the field. And so I'm just really</p> <p>22 not in a position -- I just don't have the</p> <p>23 expertise to judge all the specifics of the</p> <p>24 laboratory studies.</p> <p>25 Q. Are you familiar with the journal</p>	<p style="text-align: right;">Page 205</p> <p>1 opinion about biological plausibility?</p> <p>2 MS. PARFITT: Objection. Your</p> <p>3 question was additional studies since 2019.</p> <p>4 As you know, she has testified on the issue</p> <p>5 of biological plausibility prior to 2019</p> <p>6 exhaustively in her deposition. I let you</p> <p>7 go forward because there were some studies</p> <p>8 that came out since that point.</p> <p>9 MS. DAVIDSON: Can you repeat the</p> <p>10 question?</p> <p>11 (The following question was read back:</p> <p>12 Q: If it's outside your area of</p> <p>13 expertise to analyze the reliability of</p> <p>14 papers like Fletcher, Mandarino and Emi,</p> <p>15 how can you offer an opinion about</p> <p>16 biological plausibility?)</p> <p>17 MS. PARFITT: Objection. It does</p> <p>18 misstate her testimony.</p> <p>19 Please.</p> <p>20 THE WITNESS: My opinion on biological</p> <p>21 plausibility was based on a number of</p> <p>22 factors, including the movement of talc up</p> <p>23 the genital talc -- up the genital tract;</p> <p>24 the presence of a carcinogen, asbestos, in</p> <p>25 talc products; and then some other</p>

<p style="text-align: right;">Page 206</p> <p>1 potential mechanisms by which -- you know, 2 for example, inflammation and all, which is 3 a well-established mechanism of 4 carcinogenesis. 5 So for those reasons, I think that 6 there are reasons why I can make a judgment 7 about biological plausibility. 8 BY MS. DAVIDSON: 9 Q. Does ovarian cancer typically 10 originate in the ovaries? 11 A. There is data to suggest that some 12 ovarian cancers actually originate in the 13 fallopian tubes. 14 Q. Do you know what percent? 15 A. I don't think that anybody would be 16 able to say that. That would mean being able to 17 determine there is an ovarian cancer from the 18 very -- very origin of the carcinogenic 19 transformation. 20 Q. Sitting here in 2024, does the 21 scientific community generally believe that 22 ovarian cancer is caused by inflammation? 23 MS. PARFITT: Objection as to what the 24 scientific community believes or doesn't 25 believe. What does that mean? That's so</p>	<p style="text-align: right;">Page 208</p> <p>1 with that. 2 Q. So just to be clear, is it your 3 opinion that inflammation is involved in the 4 development of all cancers? 5 MS. PARFITT: Objection. Relevancy. 6 Form. 7 THE WITNESS: I believe that the 8 general consensus is that inflammation is a 9 pathway involved in many cancer types. 10 Whether or not it is all cancers or not, I 11 don't -- I don't know. But I think that it 12 is a general consensus that inflammation is 13 part of the carcinogenic pathway. 14 BY MS. DAVIDSON: 15 Q. Can you point to any papers outside of 16 the context of talc stating that inflammation 17 causes ovarian cancer? 18 MS. PARFITT: Objection. Form. 19 MS. DAVIDSON: Okay. 20 MS. PARFITT: If you can understand 21 that. 22 And I would also object based upon the 23 fact that during the deposition of 24 January 25, '19, she was examined with 25 regard to mechanism -- in particular,</p>
<p style="text-align: right;">Page 207</p> <p>1 broad. 2 MS. DAVIDSON: Thank you. That's -- I 3 think you meant "Objection to form." 4 THE WITNESS: So please repeat the 5 question. Whenever the objections come in, 6 I kind of lose my train of thought. 7 MS. DAVIDSON: Yeah, they lose -- 8 that's their purpose. 9 (The following question was read back: 10 Q: Sitting here in 2024, does the 11 scientific community generally believe that 12 ovarian cancer is caused by inflammation?) 13 MS. PARFITT: Objection. 14 THE WITNESS: Again, I don't -- I 15 can't speak for the entire scientific 16 community. I think that it is well 17 established that inflammation is one of the 18 hallmarks of cancer, one of the pathways 19 to -- to cancer. 20 BY MS. DAVIDSON: 21 Q. Is it one of the hallmarks of ovarian 22 cancer? 23 A. Just in general, inflammation is 24 considered a hallmark of -- of cancer development, 25 and so ovarian cancer, I would group within --</p>	<p style="text-align: right;">Page 209</p> <p>1 inflammatory effects of talc -- 2 MS. DAVIDSON: Uh-huh. 3 MS. PARFITT: -- as it pertains to 4 ovarian cancer. So I think we've been down 5 this road -- 6 MS. DAVIDSON: That wasn't my 7 question. 8 BY MS. DAVIDSON: 9 Q. We're sitting here in 2024. Can you 10 point to any paper that's been published in the 11 literature, that does not involve talc, suggesting 12 that inflammation leads to ovarian cancer? 13 MS. PARFITT: Objection. 14 THE WITNESS: Off the top of my head, 15 I could not point to -- to one. But, 16 again, there is a very large literature. 17 Inflammation in cancer is a topic that has 18 a huge literature. 19 BY MS. DAVIDSON: 20 Q. Do you think it was inappropriate that 21 the authors of Taher assigned lower value to 22 case-control studies based on concerns of recall 23 bias? 24 A. I think that it is -- as I have stated 25 previously, every study has strengths and</p>

<p style="text-align: right;">Page 210</p> <p>1 limitations, and I would not make a judgment about 2 the quality of a study just based on the study 3 design. There can be very good case-control 4 studies; there can be very good cohort studies; 5 and conversely, there can be very poor ones. 6 I think it is important to point out 7 that these case-control studies, if you look 8 through any textbook, any epidemiology textbook, 9 it will describe case-control studies as a -- 10 ideally designed to address diseases that are 11 relatively uncommon and have a long latency 12 period. 13 So case-control studies are extremely 14 appropriate for the question at hand. And -- I'm 15 sorry. And so I wouldn't -- 16 Oh, the other point I was going to 17 make is that all or virtually all of the 18 case-control studies, they've gone -- undergone 19 peer review for funding. Many of them were funded 20 by the National Cancer Institute. 21 So they are an appropriate design for 22 studying talc in ovarian cancer. And so I would 23 not give them a lower quality score just on that 24 basis that recall bias is a potential limitation 25 of case-control studies.</p>	<p style="text-align: right;">Page 212</p> <p>1 Q. Is that a reputable journal? 2 A. Overall, it's a pretty well-respected 3 journal, yes. 4 Q. Have you ever published there? 5 A. I don't believe I have as a first 6 author. I might have as a co-author. I don't -- 7 don't recall exactly. 8 Q. And as we discussed earlier, you're 9 not aware of any biases to the authors, correct? 10 A. Any? 11 Q. Bias. 12 A. Any bias? 13 Q. That these two authors have, are you? 14 A. I don't -- I don't know of anything 15 that would -- would lead me to make that 16 conclusion. 17 Q. They don't have any -- they don't 18 report conflicts of interest, correct? 19 A. Well, conflicts of interest and bias 20 are not synonymous, but -- 21 Q. I'm asking another question. 22 A. -- but they do not report conflicts of 23 interest. 24 Q. And I take it from our prior 25 conversation, you're not aware that "Gynecologic</p>
<p style="text-align: right;">Page 211</p> <p>1 Q. My question was simply: Do you agree 2 or disagree with Taher? 3 A. And so if he is giving a study a lower 4 quality score just because it's a case-control 5 study, I would disagree with that. 6 MS. DAVIDSON: Okay. Let's move along 7 to Exhibit -- let's mark as Exhibit 16 8 Wentzensen and O'Brien 2021. 9 (MOORMAN EXHIBIT 16, Gynecologic 10 Oncology - Talc, body powder, and ovarian 11 cancer: A summary of the epidemiologic 12 evidence, was marked for identification.) 13 BY MS. DAVIDSON: 14 Q. Again, Exhibit 16 will be "Talc, body 15 powder, and ovarian cancer: A summary of 16 epidemiologic evidence," Nicolas Wentzensen, 17 Katie M. O'Brien. I think it's 2021. 18 If you could turn to Page 9. You 19 discussed this paper in your most recent report in 20 2023, right? 21 A. I believe I did, yes. 22 Q. Yes. Thank you. 23 And where is this paper published? 24 A. It's published in "Gynecologic 25 Oncology."</p>	<p style="text-align: right;">Page 213</p> <p>1 Oncology" is one of the many papers that rejected 2 Dr. Fletcher, Harper, Saed's 2023 paper, right? 3 A. I already told you I'm unaware of the 4 publication history of that paper. 5 Q. Okay. If we could turn to Page 9 of 6 this report, the authors state at the top of 7 Page 9: Given the inability to attribute a clear 8 causal factor to the observed associations, the 9 lack of a good experimental model, the lack of a 10 specific biomarker for powder-related 11 carcinogenesis, and the inability to rule out 12 confounding by indication, it is difficult to 13 conclude that the observed associations are 14 causal. 15 Do you see that? 16 A. I do see that. 17 Q. Did you include that discussion -- did 18 you reference that statement in your report? 19 A. I did not reference that specific 20 statement, no. 21 Q. Do you agree with the authors that any 22 association is, quote, "small"? 23 A. I -- I'd prefer not to use adjectives 24 like "small." I think it's much more helpful just 25 to report what the relative risk is. It's a</p>

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1 relative risk of 1.25, 1.3, whatever. I think
 2 that that is a more accurate and preferable way to
 3 do it.
 4 I would further state that in terms of
 5 the public health impact, it is dependent both on
 6 the -- the size of the relative risk and the --
 7 the prevalence of use of the exposure.
 8 Q. So you're -- just to be clear, you're
 9 refusing to agree with these authors that the
 10 association is small?
 11 MS. PARFITT: Objection. Form.
 12 THE WITNESS: I would not agree with
 13 that because I don't like to -- I would not
 14 describe it with that adjective. I would
 15 just report what the association is,
 16 quantify it.
 17 BY MS. DAVIDSON:
 18 Q. Drs. Wentzensen and O'Brien state,
 19 quote: We currently do not understand the causal
 20 factors that underlie the observed weak
 21 associations between genital powder use and
 22 ovarian cancer risk.
 23 Do you disagree with that statement?
 24 A. Where are you reading from?
 25 Q. You're challenging my eyes again.

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1 Further down the same paragraph, or maybe it's --
 2 MS. DAVIDSON: Can you point to where
 3 the sentence is?
 4 All right. I'm going to have to give
 5 in to Michelle and get reading glasses. I
 6 usually read the papers online where you
 7 can make them bigger.
 8 MR. TRANGLE: It's on Page 8.
 9 MS. DAVIDSON: Oh, the prior page.
 10 That's why.
 11 MR. TRANGLE: At the very, very end.
 12 MS. DAVIDSON: Yeah. Yeah.
 13 BY MS. DAVIDSON:
 14 Q. In summary -- sorry about that.
 15 MR. TRANGLE: Page 8 at the very end.
 16 BY MS. DAVIDSON:
 17 Q. Bottom of Page 8. In summary, we
 18 currently do not understand the causal factors
 19 that underlie the observed weak association
 20 between genital powder use and ovarian cancer
 21 risk.
 22 MS. DAVIDSON: Sorry you had to type
 23 that twice. I shouldn't have repeated it.
 24 BY MS. DAVIDSON:
 25 Q. Anyway, do you agree or disagree with

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1 that statement?
 2 A. I mean, I -- I think that I would say
 3 that we -- I neither totally agree nor totally
 4 disagree with that in that our understanding of
 5 most risk factors and cancer is not complete.
 6 But I think that we do have some
 7 understanding of potential causal factors, like,
 8 namely that asbestos is found in many talc
 9 products. It's a carcinogen. So I kind of -- I
 10 don't completely disagree nor agree with that
 11 statement.
 12 Q. You just said that asbestos is found
 13 in many talc products. What do you mean by
 14 "many"?
 15 A. Based on analyses that I have seen,
 16 analyses done by the plaintiff's expert, I have --
 17 back in the -- as we discussed earlier, I have
 18 seen some documents -- internal documents from J&J
 19 that noted that talc was found in some samples.
 20 And the FDA also found talc in some samples, so...
 21 Q. Did the FDA find talc in many -- did
 22 the FDA find asbestos in many batches of Johnson's
 23 Baby Powder?
 24 MS. PARFITT: And, Jessica, if I
 25 can -- she said "talc" in the product. Did

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1 you mean "asbestos" in the product?
 2 Everybody is getting tired.
 3 THE WITNESS: Yeah, I did mean --
 4 MS. DAVIDSON: We can take a break in
 5 a few minutes.
 6 BY MS. DAVIDSON:
 7 Q. Did --
 8 MS. PARFITT: Yeah, please. So could
 9 we -- maybe could you ask --
 10 BY MS. DAVIDSON:
 11 Q. Can you answer my question?
 12 MS. PARFITT: I just want to get it
 13 clear.
 14 THE WITNESS: Again, I -- I know that
 15 they -- they did find -- you know, their
 16 report from 2020. The exact numbers, I am
 17 not recalling off the top of my head.
 18 BY MS. DAVIDSON:
 19 Q. Of all the lots that J&J has ever
 20 tested of Johnson's Baby Powder, how many times
 21 have they found asbestos?
 22 A. Of course that's an impossible
 23 question to answer.
 24 Q. What do you mean? Of all the times
 25 that the FDA has reported on testing of

<p style="text-align: right;">Page 218</p> <p>1 Johnson's --</p> <p>2 A. Oh, you --</p> <p>3 Q. -- Baby Powder, how many times have</p> <p>4 they reported finding --</p> <p>5 A. I don't -- I already answered it. I</p> <p>6 said, I don't recall the exact numbers.</p> <p>7 Q. And are you -- do you consider</p> <p>8 yourself qualified to analyze the reliability of</p> <p>9 the work done by plaintiff's asbestos expert?</p> <p>10 MS. PARFITT: Objection. Form.</p> <p>11 THE WITNESS: I have already stated</p> <p>12 that I am not an expert in the mineral</p> <p>13 science, and so I know that that will be</p> <p>14 discussed further, and --</p> <p>15 BY MS. DAVIDSON:</p> <p>16 Q. But you did say you're relying on his</p> <p>17 work?</p> <p>18 A. I am saying that that is part of what</p> <p>19 I was considering.</p> <p>20 Q. In reaching the conclusion that</p> <p>21 asbestos is found in many talc products?</p> <p>22 A. I mean -- yes. Yes.</p> <p>23 Q. Other than J&J internal products, the</p> <p>24 FDA's finding in 2020, and plaintiff's expert's</p> <p>25 opinions, is there anything else you're relying on</p>	<p style="text-align: right;">Page 220</p> <p>1 MS. PARFITT: I can object --</p> <p>2 MS. DAVIDSON: Okay.</p> <p>3 MS. PARFITT: -- to anything --</p> <p>4 MS. DAVIDSON: Object all you want.</p> <p>5 MS. PARFITT: -- I find objectionable.</p> <p>6 MS. DAVIDSON: Let's object all you</p> <p>7 want.</p> <p>8 Can you repeat the question?</p> <p>9 MS. PARFITT: I will do that --</p> <p>10 MS. DAVIDSON: Okay.</p> <p>11 MS. PARFITT: -- Jessica --</p> <p>12 MS. DAVIDSON: Please do.</p> <p>13 MS. PARFITT: -- as you will do --</p> <p>14 MS. DAVIDSON: Can you repeat the</p> <p>15 question?</p> <p>16 MS. PARFITT: -- when we take your</p> <p>17 experts. Believe me, you will.</p> <p>18 (The following question was read back:</p> <p>19 Q: Other than J&J internal products,</p> <p>20 the FDA's finding in 2020, and plaintiff's</p> <p>21 expert's opinions, is there anything else</p> <p>22 you're relying on for your opinion that</p> <p>23 asbestos is found in, quote, "many talc</p> <p>24 products"?)</p> <p>25 MS. PARFITT: Objection. Previously</p>
<p style="text-align: right;">Page 219</p> <p>1 for your opinion that asbestos is found in, quote,</p> <p>2 "many talc products"?</p> <p>3 MS. PARFITT: I'm going to object.</p> <p>4 This was examined exhaustively in 2019.</p> <p>5 This is a total redo. She answered those</p> <p>6 questions --</p> <p>7 MS. DAVIDSON: She answered a</p> <p>8 question. I'm asking a follow-up.</p> <p>9 Michelle, that's ridiculous.</p> <p>10 MS. PARFITT: You know what, Jessica?</p> <p>11 Nothing I'm going to say is going to be</p> <p>12 ridiculous. I'm making my objection. I'm</p> <p>13 permitted to do so and --</p> <p>14 MS. DAVIDSON: The FDA thing happened</p> <p>15 after her last deposition.</p> <p>16 MS. PARFITT: Beg your pardon?</p> <p>17 MS. DAVIDSON: The FDA thing happened</p> <p>18 after her last deposition. We've never</p> <p>19 discussed this.</p> <p>20 MS. PARFITT: Did the others occur</p> <p>21 before the last deposition?</p> <p>22 MS. DAVIDSON: What does that matter?</p> <p>23 You can't parse it like that. She made a</p> <p>24 statement. I'm allowed to ask a follow-up</p> <p>25 question.</p>	<p style="text-align: right;">Page 221</p> <p>1 examined during the deposition 2019.</p> <p>2 It's not funny, Jessica. None of this</p> <p>3 is funny. My ladies are dying that I</p> <p>4 represent, so I find nothing funny about</p> <p>5 this deposition, I must tell you.</p> <p>6 THE WITNESS: I think that from the</p> <p>7 standpoint of it is not -- okay. Yes, I am</p> <p>8 relying on those three sources of data</p> <p>9 that -- that were described in the</p> <p>10 question.</p> <p>11 BY MS. DAVIDSON:</p> <p>12 Q. Okay. We can move on, then. I just</p> <p>13 wanted to make sure there was nothing else.</p> <p>14 The authors of O'Brien and Wentzensen</p> <p>15 state: The low relative risk translates to a very</p> <p>16 low absolute risk increase, given the rarity of</p> <p>17 ovarian cancer.</p> <p>18 Do you disagree with that statement?</p> <p>19 A. I disagree with what it conveys. We</p> <p>20 know that in -- ovarian cancer is a relatively low</p> <p>21 incidence of cancer. But as several -- and there</p> <p>22 have been some studies that have calculated the</p> <p>23 population attributable risk for talc use and</p> <p>24 ovarian cancer. And I -- if I'm recalling, some</p> <p>25 of -- some reports have calculated the population</p>

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1 attributable risk as about 12 to 15 percent of
 2 ovarian cancers, you know -- as you would
 3 interpret the population attributable risk, if all
 4 other factors were kept equal and you could
 5 eliminate talc, you would be able to, in theory,
 6 eliminate 12 to 15 percent of ovarian cancers.
 7 And so among the 20-some-thousand
 8 ovarian cancers each year, eliminating 2,000,
 9 3,000 of them by no talc use, I would say that
 10 that is not a small absolute risk. You can
 11 interpret the numbers in different ways, but I
 12 think that the public health importance is -- is
 13 quite large, and I think that that statement does
 14 not convey that. It conveys that it's a
 15 negligible impact, and I think that it's a big
 16 impact.
 17 Q. Dr. Wentzensen and O'Brien have
 18 devoted their careers to public health and cancer,
 19 right?
 20 A. Yes, as far as I know. I --
 21 Q. Have you --
 22 A. I --
 23 Q. Have you done any study of historical
 24 patterns of talc use and whether they match
 25 historical patterns of ovarian cancer?

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1 A. I have not done such a study. And it
 2 is -- it really would not be particularly
 3 informative because of all the other risk factors
 4 and how they might have changed over time as well.
 5 And so it's not like you could look
 6 at -- keep all other risk factors static and then
 7 talc went up or went down and how did it affect
 8 it. I don't think that study would be
 9 particularly informative.
 10 Q. What studies were you referring to in
 11 terms of your testimony that some studies have
 12 found an absolute percentage of talc cases that
 13 they believe are caused by ovarian cancer [sic]?
 14 A. Let's see. Let me just double-check
 15 that my -- I believe that the study by Wu might
 16 have reported it. But, again, many studies and
 17 all the specific details -- my eyes are so tired
 18 that it's hard to read.
 19 I'm happy to take a couple -- I'm not
 20 seeing it right in here. But I know that there
 21 have been studies that have calculated the
 22 population attributable risk.
 23 Q. But you're not sure whether or not
 24 that's Wu?
 25 A. Again, you know, trying to remember

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1 this many details from many studies, I can't swear
 2 that it was there. That was the name that was
 3 sticking in my mind, but --
 4 Q. In -- in their 2021 paper, Wentzensen
 5 and O'Brien discuss the Schildkraut paper, right?
 6 A. I believe the Schildkraut paper was
 7 certainly included in there. Was there a
 8 specific -- I'm -- right off, I know that the
 9 Schildkraut paper was one of the studies included
 10 in here in the text.
 11 I'm -- I'm not putting my fingers on
 12 any discussion of the Schildkraut paper. And I
 13 just don't recall specifically whether -- how it
 14 was mentioned, if it was mentioned in here.
 15 Q. It's mentioned on Page 5 under their
 16 discussion of recall bias, wasn't it?
 17 A. Okay. Yes. Yes, I see.
 18 Q. Do you disagree with their analysis of
 19 Schildkraut?
 20 A. They are recording the -- exactly what
 21 we reported in our -- our papers, that, yes, there
 22 was an attenuation of the odds ratio when the
 23 analysis was limited to women who had completed
 24 the questionnaire prior to 2014's. So --
 25 Q. Okay.

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1 A. -- they're just stating what we stated
 2 in our paper, basically.
 3 Q. At the top of Page 4, Wentzensen and
 4 O'Brien say: The data suggests that there are
 5 several etiologically distinct types of cancers
 6 that manifest in the ovaries.
 7 Do you disagree with that statement?
 8 A. No. I think that -- I think that
 9 their statement is accurate.
 10 Q. And "etiologically distinct types of
 11 cancers" means cancers with different
 12 pathogenesis?
 13 A. What I believe that they're referring
 14 to is that some associations vary a bit by
 15 subtype. So associations with risk factors vary
 16 by subtype a bit.
 17 Q. Uh-huh.
 18 A. So, you know, if it's -- for example,
 19 smoking is associated more strongly with some
 20 ovarian cancer subtypes than others --
 21 Q. And they say: It's been proposed that
 22 a majority of high-grade serous carcinomas arise
 23 from the fallopian tubes, while endometrioid
 24 carcinomas may arise from the orthotopic or
 25 ectopic endometrial tissue.

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1 Do you agree with that statement?

2 A. The -- the statement that that has

3 been proposed, yes. That -- that has indeed been

4 proposed.

5 Q. And is there now a general view in the

6 ovarian cancer science community that most

7 high-grade serous carcinoma originates in the

8 fallopian tubes?

9 MS. PARFITT: Objection to form.

10 THE WITNESS: I -- I know that that is

11 frequently reported in the literature, that

12 many ovarian cancers, particularly the

13 high-grade serous, arise in the fallopian

14 tubes. Whether there is a consensus, I

15 can't speak for the entire body of ovarian

16 cancer scientists.

17 BY MS. DAVIDSON:

18 Q. So you don't know whether there's a

19 consensus right now on that topic?

20 MS. PARFITT: Objection. Asked and

21 answered.

22 THE WITNESS: I know that that's

23 frequently mentioned. But whether it could

24 be characterized as a consensus, I -- I

25 don't know.

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1 BY MS. DAVIDSON:

2 Q. Do you agree that many ovarian cancer

3 risk factors and exposures are specific to certain

4 subtypes?

5 A. I'm not sure that I would agree with

6 that adjective, "many." There are some

7 differences by subtypes, but I don't know that I

8 would agree with the "many."

9 MS. DAVIDSON: All right. We've been

10 going about an hour. Let's take a break.

11 You seem tired.

12 THE WITNESS: I am tired.

13 * * *

14 (Whereupon, there was a recess in the

15 proceedings from 4:26 p.m. to 4:46 p.m.)

16 * * *

17 BY MS. DAVIDSON:

18 Q. Are you offering an opinion in this

19 litigation that the inhalation of talc can cause

20 ovarian cancer?

21 A. The opinion that I offered was related

22 to talc exposure, and nearly all of the data are

23 related to perineal exposure. And so that's where

24 my opinion lies.

25 Q. I'm not sure I understand the answer

Page 228

1 to this question. And it's kind of important.

2 Will you be testifying at trial that

3 inhaling talc can cause ovarian cancer?

4 A. Well, at this point, I don't even know

5 that I -- I will be testifying at trial. As far

6 as I know, there's no trial date set. I have not

7 been asked at this point to testify at any trial.

8 So I don't know what I would be testifying to.

9 Q. Well, if you're offering an opinion

10 about --

11 MS. DAVIDSON: Can we go off the

12 record.

13 (Off-the-record conference.)

14 BY MS. DAVIDSON:

15 Q. As of today, February 2024, are you

16 offering an opinion in this litigation that the

17 inhalation of talc can lead to the development of

18 ovarian cancer?

19 A. I have offered an opinion about

20 exposure to talc generally and ovarian cancer. I

21 am focusing on the epidemiologic studies, and I'm

22 not aware of any large-scale epidemiologic study

23 that has reported on inhalation of talc in ovarian

24 cancer.

25 Q. Have there been any occupational

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1 studies that have looked at occupational exposure

2 to talc and the development of ovarian cancer?

3 MS. PARFITT: That was asked and

4 answered earlier.

5 MS. DAVIDSON: Asked and answered

6 when?

7 MS. PARFITT: It was early on in the

8 deposition when you were talking about

9 occupational and nonoccupational exposure.

10 MS. DAVIDSON: That was asbestos. We

11 were talking about asbestos exposure. I'm

12 talking about talc exposure.

13 Michelle, please don't interrupt my

14 questions when -- when what you're saying

15 isn't even true. Try to listen carefully

16 to the question.

17 MS. PARFITT: Whoa, whoa, whoa, whoa,

18 whoa, whoa, whoa.

19 BY MS. DAVIDSON:

20 Q. My question is --

21 MS. PARFITT: Don't say it isn't true.

22 Some of your questions, Jessica, with all

23 due respect, haven't been all that clear.

24 MS. DAVIDSON: Thank you so much. I'm

25 sure you would do better.

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1 MS. PARFITT: I -- I'm not saying I
 2 would do better.
 3 MS. DAVIDSON: Can -- can you
 4 reread -- can you reread the question? Can
 5 you read the question?
 6 MS. PARFITT: I just want a clear
 7 record, Jessica. I'm sure you do, too.
 8 MS. DAVIDSON: We have a clear record.
 9 Can you read the question?
 10 MS. PARFITT: Well, let's get one.
 11 (The following question was read back:
 12 Q: Have there been any occupational
 13 studies that have looked at occupational
 14 exposure to talc and the development of
 15 ovarian cancer?)
 16 MS. PARFITT: Objection. Asked and
 17 answered.
 18 THE WITNESS: Again, the occupational
 19 literature, I have not reviewed that in
 20 quite a while. As -- I do recall -- I
 21 believe that there have been studies of
 22 occupational exposure to talc and ovarian
 23 cancer, but I'm -- I haven't looked at
 24 those -- those studies. And I'm trying --
 25 it's not clear in my mind right now what

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1 the studies were, you know.
 2 I looked at, I believe, both
 3 occupational studies of talc, occupational
 4 studies of asbestos. And because I haven't
 5 looked at them in so long, I just can't
 6 recall at this moment what was reported in
 7 those studies.
 8 BY MS. DAVIDSON:
 9 Q. Have you reviewed a paper from July
 10 2023 titled Lisa Leung, "Occupational environment
 11 and ovarian cancer risk"?
 12 A. I'm sorry. The author, again?
 13 Q. Lisa L-E-U-N-G.
 14 A. I am not recalling that paper
 15 specifically.
 16 Q. Have you reviewed any literature since
 17 2019 that you believe would support an opinion
 18 that inhalation of talc can cause ovarian cancer?
 19 MS. PARFITT: Objection. Asked and
 20 answered.
 21 THE WITNESS: I recall reading papers
 22 that discussed that inhalation of talc and
 23 movement through the body is possible.
 24 I -- I just don't recall specifically where
 25 I read that at this point in time.

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1 BY MS. DAVIDSON:
 2 Q. And you don't recall if that was
 3 before or after your 2019 deposition?
 4 A. No, I don't recall.
 5 Q. Do you know whether ovarian cancer
 6 diagnoses have fallen in the last three decades?
 7 A. Whether ovarian cancer diagnoses --
 8 Q. -- diagnoses have dropped in the last
 9 three decades?
 10 MS. PARFITT: Objection. Form.
 11 THE WITNESS: Again, you're asking me
 12 to recall some data that I have looked at,
 13 but the specific numbers I am not recalling
 14 at this point.
 15 BY MS. DAVIDSON:
 16 Q. As an epidemiologist in this area, I'm
 17 asking whether you know whether ovarian cancer
 18 rates have fallen in the last three decades.
 19 MS. PARFITT: Objection. Form.
 20 THE WITNESS: And I -- I have answered
 21 it, that I just don't -- I mean, I
 22 certainly have looked at those numbers.
 23 I'm just not recalling at this point
 24 exactly what the -- the trends are.
 25 BY MS. DAVIDSON:

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1 Q. In your report, you mention multiple
 2 letters to the editor by Dr. Egilman, correct, in
 3 your two reports?
 4 A. I -- I know that I mentioned at least
 5 one of them. I don't know that it was multiple
 6 letters.
 7 Q. Do you recall how many times
 8 Dr. Egilman has written letters to the editor that
 9 you've cited in your various reports?
 10 A. No, I do not recall that.
 11 Q. Do you know whether plaintiff's
 12 counsel asked Dr. Egilman to write those letters?
 13 A. No, I do not know that.
 14 Q. How did you come to be retained in the
 15 Zantac litigation?
 16 A. I was approached by Steve Rotman, an
 17 attorney out of Boston, and I -- I don't know
 18 precisely how he got my name or information. And
 19 he talked to me about would I be interested in
 20 reviewing the literature on this topic.
 21 And as it was at a time point where I
 22 was close to retiring from Duke but we were still
 23 pretty heavily in the midst of COVID in early
 24 2021, that I agreed to look at the literature in
 25 relation to that. So that's how it came about.

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1 Q. When you did your expert report in
 2 Zantac, did you explicitly assign different
 3 weights to different studies?
 4 A. I discussed some of the studies that I
 5 found more persuasive. I think you probably used
 6 some phrasing that I weighted it more heavily or
 7 not.
 8 Q. In fact, you used the terms "strong"
 9 and "moderate" in terms of the weight you provided
 10 to various studies, correct?
 11 A. Yes, I -- I believe that I did.
 12 Q. Why didn't you do that here?
 13 A. I had not done that in the -- the
 14 previous report, and so I was kind of keeping it
 15 consistent with what I had done previously.
 16 Q. What previous report?
 17 A. In my previous report on talc.
 18 Q. I guess my question is: Why did you
 19 do that in the Zantac litigation and not the talc
 20 litigation?
 21 MS. PARFITT: Objection. Form.
 22 THE WITNESS: I don't recall exactly
 23 what the rationale was. I -- I just don't
 24 recall the exact rationale for it.
 25 BY MS. DAVIDSON:

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1 Q. Okay. The Zantac court criticized
 2 your methodology on the ground that some of the
 3 stated reasons for your analysis, such as length
 4 of time, sample sizes, ascertainment of exposure,
 5 were, quote, "inconsistently applied." Do you
 6 think that was a fair criticism?
 7 A. No. I already told you that I did
 8 not -- I did not agree with that decision, and I
 9 think that I pretty explicitly described my
 10 rationale for decisions that I made about each of
 11 the studies.
 12 Q. The Zantac court was also concerned
 13 that you ignored the authors' conclusions in some
 14 of the studies that you cited. Was that a fair
 15 criticism?
 16 A. I don't think that I ignored any of
 17 the authors' conclusions. I think that there were
 18 instances where I disagreed. And, again, when I
 19 disagreed with the conclusion, I tried to explain
 20 why I disagreed with that conclusion.
 21 Q. The Zantac court felt that you
 22 selected data from studies that fit with your
 23 ultimate opinion while simultaneously ignoring
 24 data in the very same studies that did not fit
 25 with your opinions. Was that a fair criticism?

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1 A. I don't think that was fair. I don't
 2 think that I -- I did that.
 3 Q. Have you been asked to provide expert
 4 opinions in the state court litigation of Zantac?
 5 A. I'm not aware of any state court
 6 litigation. I have not been approached.
 7 Q. Are you aware of any paper by an
 8 independent scientist not associated with this
 9 litigation that has concluded that talc use can
 10 cause ovarian cancer?
 11 MS. PARFITT: Objection. Form.
 12 MS. DAVIDSON: Do you want the
 13 question repeated?
 14 THE WITNESS: Yes, please repeat it
 15 for me.
 16 (The following question was read back:
 17 Q: Are you aware of any paper by an
 18 independent scientist not associated with
 19 this litigation that has concluded that
 20 talc use can cause ovarian cancer?)
 21 MS. PARFITT: Objection. Form.
 22 THE WITNESS: The Health Canada
 23 report, I think they made the conclusion
 24 that --
 25 BY MS. DAVIDSON:

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1 Q. Is the Health Canada report --
 2 MS. PARFITT: Wait. She's --
 3 BY MS. DAVIDSON:
 4 Q. -- a published paper in the scientific
 5 literature?
 6 MS. PARFITT: -- she's in the middle
 7 of -- she's in the middle of her response.
 8 Please let her finish.
 9 BY MS. DAVIDSON:
 10 Q. I think you might have misheard the
 11 question.
 12 MS. PARFITT: No. Let her finish what
 13 she was saying, and then you can say she
 14 didn't hear your question.
 15 THE WITNESS: Yeah. What I was
 16 stating, I said, the Health Canada report
 17 stated the available data are indicative of
 18 a causal relationship.
 19 BY MS. DAVIDSON:
 20 Q. Do you remember my question?
 21 A. Please repeat it for me, please.
 22 Q. Are you aware of any published paper
 23 in the scientific literature by an independent
 24 scientist who is not a paid expert in this
 25 litigation concluding that talc can cause ovarian

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1 cancer?

2 A. Well, I would argue that this is in

3 the scientific literature, that this was not done

4 by a plaintiff expert, and it concluded that there

5 was a causal relationship. They don't -- I don't

6 recall if they specified who actually wrote the

7 paper, but I would argue this is part of the

8 scientific literature.

9 Q. Do you know who wrote the Health

10 Canada report?

11 A. I just stated that I don't remember

12 the -- if they -- I just don't remember

13 specifically if they named the specific authors or

14 not. I just don't remember that.

15 Q. Did Health Canada -- was that Health

16 Canada published in any peer-reviewed literature?

17 A. I don't know that it was published in

18 the peer-reviewed literature.

19 Q. Does the Health Canada report rely in

20 part on litigation reports by plaintiffs' experts?

21 MS. PARFITT: Objection. Form.

22 THE WITNESS: My understanding is that

23 they considered some of the plaintiffs'

24 expert reports as well as some of the -- I

25 think also some of the defendant expert --

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1 or some of what came from the defendants as

2 well.

3 BY MS. DAVIDSON:

4 Q. Have you ever read a paper in the

5 peer-reviewed scientific literature that relies on

6 litigation expert reports?

7 MS. PARFITT: Objection. Misstates

8 her testimony.

9 You can answer the question.

10 MS. DAVIDSON: It's not misstating any

11 testimony. I'm asking.

12 THE WITNESS: I'm sorry.

13 MS. DAVIDSON: That's just -- can you

14 repeat the question?

15 Could you stop obstructing?

16 MS. PARFITT: Jessica --

17 MS. DAVIDSON: Go ahead.

18 MS. PARFITT: -- please. We made it

19 through a whole day. Don't characterize my

20 objections, and I won't characterize your

21 questions.

22 MS. DAVIDSON: You just characterized

23 the question -- mischaracterized it,

24 actually.

25 Go ahead.

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1 (The following question was read back:

2 Q: Have you ever read a paper in the

3 peer-reviewed scientific literature that

4 relies on litigation expert reports?)

5 MS. PARFITT: Object to the form.

6 Broad.

7 THE WITNESS: I cannot recall that.

8 I -- when I was reading that in the Health

9 Canada report, it struck me as a little bit

10 unusual. But I also thought that it was

11 actually -- they were considering arguments

12 made by scientists on either side of the

13 question.

14 So I thought that it was a bit

15 unusual, but I thought that it was perhaps

16 the strength of their evaluation of all of

17 the literature.

18 BY MS. DAVIDSON:

19 Q. Do you recall the Zantac court saying

20 that no independent scientist or publication has

21 concluded that ranitidine causes cancer?

22 A. I -- I mean, that was a very long

23 document, as you acknowledged. And do I recall

24 that specific statement? I don't recall it.

25 It's -- it might have been in there.

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1 Q. Are you aware of a single scientific

2 body in the United States that has concluded that

3 talc can cause ovarian cancer?

4 A. I am not aware of that.

5 Q. Has anyone who is not a plaintiff's

6 expert written a letter criticizing either O'Brien

7 2020 or O'Brien, Wentzensen 2021?

8 A. I don't recall all the letters to the

9 editor. I -- I am not aware of them other than

10 the letters that I referenced in my report.

11 Q. And the ones you referenced in your

12 report were by plaintiffs' experts, correct?

13 A. Correct.

14 Q. If a study asks women about talc use

15 after the women have gone through menopause, that

16 doesn't mean that the women did not use talc

17 before menopause, correct?

18 A. If they asked about talc use after

19 menopause --

20 Q. Uh-huh.

21 A. -- it doesn't mean they didn't use it

22 before menopause? Lots of negatives.

23 No, it does not mean that. If they

24 reported it after menopause, they could have used

25 it -- depending on how the question was phrased,

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1 they could have used it anytime throughout
 2 their -- their life.
 3 MS. DAVIDSON: Let's go off the
 4 record.
 5 * * *
 6 (Whereupon, there was a recess in the
 7 proceedings from 5:09 p.m. to 5:11 p.m.)
 8 * * *
 9 BY MS. DAVIDSON:
 10 Q. I just have one other question,
 11 subject to any questions from Michelle. If we
 12 could go back to O'Brien 2020, which is Exhibit 2,
 13 if I -- yeah, it's Exhibit 2. I'm not having a
 14 senior moment today despite my blindness.
 15 If you can just look at the abstract
 16 for O'Brien 2020, does this refresh your
 17 recollection as to whether O'Brien 2020 had a
 18 definition for "frequent talc use"? Under
 19 "Exposures."
 20 A. Let's see.
 21 Q. I'm reading the abstract under
 22 "Exposures."
 23 A. Long-term -- rather, "frequent," they
 24 defined it as greater or equal to 1 time per week.
 25 Q. And O'Brien was published before

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1 Woolen, correct?
 2 A. This was 2020, and Woolen was -- was
 3 later, yeah.
 4 Q. So both O'Brien and Davis define
 5 "frequent" differently from Woolen, correct?
 6 A. What -- I -- we have talked about this
 7 repeatedly and --
 8 Q. Well, we haven't talked about this at
 9 all, actually.
 10 A. No. No. What I'm saying is, Woolen
 11 was -- they used that cut point for a criteria
 12 for including a study in their meta-analysis.
 13 Q. Uh-huh.
 14 A. And from there, the purpose of their
 15 analysis was to -- what was -- to examine what was
 16 the risk with the highest level of exposure.
 17 I don't think it was ever necessarily
 18 their intention to look at 2 times a week or
 19 greater. Their intent was to look at the highest
 20 level of exposure in the studies.
 21 And so what -- this definition of
 22 "frequent" in O'Brien, it is different than the
 23 definition of what they considered the minimum
 24 level of use for frequent use to be included in
 25 their meta-analysis.

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1 MS. DAVIDSON: Okay. Michelle.
 2 MS. PARFITT: Thank you.
 3 * * *
 4 EXAMINATION
 5 BY MS. PARFITT:
 6 Q. Just a couple, Doctor.
 7 Dr. Moorman, do you have knowledge
 8 whether at the time that Dr. Harlow and
 9 Dr. Rothman wrote their letters -- editorial
 10 letters in response to the O'Brien paper, whether
 11 or not they were retained plaintiffs' experts?
 12 A. I do not know when they were retained
 13 as experts. So I can't say at that point whether
 14 they were or -- or not.
 15 Q. All right. Also, did you have an
 16 opportunity to review the reply by Katie O'Brien
 17 to the letters to the editor written by Dr. Harlow
 18 and Dr. Rothman?
 19 A. I did.
 20 Q. What was the nature of the reply by
 21 Dr. O'Brien to the criticisms that were registered
 22 by Dr. Harlow and Dr. Rothman?
 23 A. There were several points on which
 24 Dr. O'Brien acknowledged that the -- the
 25 criticisms raised by Dr. Harlow, Rothman and

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1 Cramer were valid. In particular, noted that the
 2 misclassification in the cohort studies could have
 3 resulted in an underestimate of the true relative
 4 risk. And -- let's see. And they also addressed
 5 the point about the -- reporting on the point
 6 estimate and not relying just on the statistical
 7 significance.
 8 MS. PARFITT: I don't have any further
 9 questions. Thank you, Dr. Moorman.
 10 MS. DAVIDSON: Let's just mark
 11 Dr. Harlow's letter as Exhibit --
 12 THE REPORTER: 17.
 13 MS. DAVIDSON: -- Exhibit 17.
 14 (MOORMAN EXHIBIT 17, Dr. Harlow's
 15 letter in response to the O'Brien paper,
 16 was marked for identification.)
 17 * * *
 18 EXAMINATION
 19 BY MS. DAVIDSON:
 20 Q. I just marked the letter from -- I
 21 just marked as Exhibit -- 17?
 22 MR. TRANGLE: 17.
 23 BY MS. DAVIDSON:
 24 Q. -- the letter that Dr. Harlow wrote
 25 to -- in response to the O'Brien paper. And you

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1 were just asked a minute ago by Ms. Parfitt
 2 whether Dr. Harlow had yet been serving as a
 3 litigation expert. Can you read the conflict of
 4 interest disclosure for Dr. Harlow?
 5 A. It says: Dr. Harlow reported
 6 publishing research and serving as a consultant on
 7 the topic of talc and ovarian cancer. No other
 8 disclosures were reported.
 9 Q. Does this indicate who Dr. Harlow was
 10 serving as a consultant to?
 11 A. No, it does not.
 12 MS. DAVIDSON: Let's go off the record
 13 for a minute.
 14 * * *
 15 (Whereupon, there was a recess in the
 16 proceedings from 5:17 p.m. to 5:19 p.m.)
 17 * * *
 18 BY MS. DAVIDSON:
 19 Q. When -- when Drs. O'Brien and
 20 Wentzensen published their paper in 2021, right,
 21 that we talked about earlier today --
 22 A. Okay.
 23 Q. -- in which they stated that it is
 24 difficult to conclude that the observed
 25 associations are causal, that was after they had

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1 received these letters to the editor and responded
 2 to them, correct?
 3 A. Let's see. Yeah. Yes.
 4 MS. DAVIDSON: Okay. I don't have any
 5 further questions.
 6 THE WITNESS: Okay.
 7 * * *
 8 EXAMINATION
 9 BY MS. PARFITT:
 10 Q. Dr. Moorman, if you would kindly refer
 11 to Exhibit Number 17 again. It was the letter to
 12 the editor by Dr. Harlow and Dr. Rothman.
 13 A. Uh-huh.
 14 Q. Do you have that in front of you?
 15 A. Yes.
 16 Q. All right. You were asked by counsel
 17 with regard to the disclosures of conflicts of
 18 interest. Would you read that into the record,
 19 please?
 20 A. Okay. Dr. Harlow reported publishing
 21 research and serving as a consultant on the topic
 22 of talc and ovarian cancer risk. No other
 23 disclosures were reported.
 24 Q. Okay. Does that reflect which side
 25 Dr. Harlow was reporting a conflict of interest

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1 on?
 2 A. It does not.
 3 Q. Does the conflict of interest noted in
 4 the letters to the editor mention any conflict of
 5 interest by Kenneth Rothman?
 6 A. It does not.
 7 Q. Does the letter to the editor,
 8 Exhibit 17, reflect any conflict of interest by
 9 Eleanor Murray?
 10 A. It does not.
 11 MS. PARFITT: I don't have any further
 12 questions.
 13 (WHEREUPON, the deposition was
 14 concluded at 5:21 p.m.)
 15 (Signature Reserved.)
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1 DEPOSITION ERRATA SHEET
 2
 3 Case Caption: In Re: Johnson & Johnson Talcum
 4 Power Products Marketing, Sales Practices, and
 5 Products Liability Litigation
 6
 7 DECLARATION UNDER PENALTY OF PERJURY
 8
 9 I declare under penalty of perjury
 10 that I have read the entire transcript of
 11 my deposition taken in the captioned matter
 12 or the same has been read to me, and the
 13 same is true and accurate, save and except
 14 for changes and/or corrections, if any, as
 15 indicated by me on the DEPOSITION ERRATA
 16 SHEET hereof, with the understanding that I
 17 offer these changes as if still under oath.
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 22 Signed on the _____ day of
 23 _____, 20____.
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1 DEPOSITION ERRATA SHEET

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22 Reason for change: _____

23 SIGNATURE: _____ DATE: _____

24 PATRICIA G. MOORMAN, Ph.D.

25

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1 STATE OF NORTH CAROLINA

2 COUNTY OF CABARRUS

3 REPORTER'S CERTIFICATE

4 I, Cindy A. Hayden, RMR, CRR, a Notary

5 Public, do hereby certify that there came before

6 me on February 13, 2024, the person hereinbefore

7 named who was by me duly sworn to testify to the

8 truth and nothing but the truth of his or her

9 knowledge concerning the matters in controversy in

10 this cause; that the witness was thereupon

11 examined under oath, the examination reduced to

12 typewriting under my direction, and the deposition

13 is a true record of the testimony given by the

14 witness.

15 I further certify that I am neither

16 attorney or counsel for, nor related to, or

17 employed by any attorney or counsel employed by

18 the parties hereto or financially interested in

19 the action.

20 IN WITNESS WHEREOF, I have hereto set

21 my hand this 26th day of February, 2024.

22

23 _____

24 Cindy A. Hayden, Notary Public

25 Notary Public Number 20020910053

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1 DEPOSITION ERRATA SHEET

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24 PATRICIA G. MOORMAN, Ph.D.

25

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